FOUNDED IN 18

RAILWAY AGE

JUNE 4, 194

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MORE THAN
122,000
CARS
ARE EQUIPPED
WITH...

WINE

Cast Steel
HOPPER
FRAMES

E WINE RAILWAY APPLIANCE COMPANY • TOLED

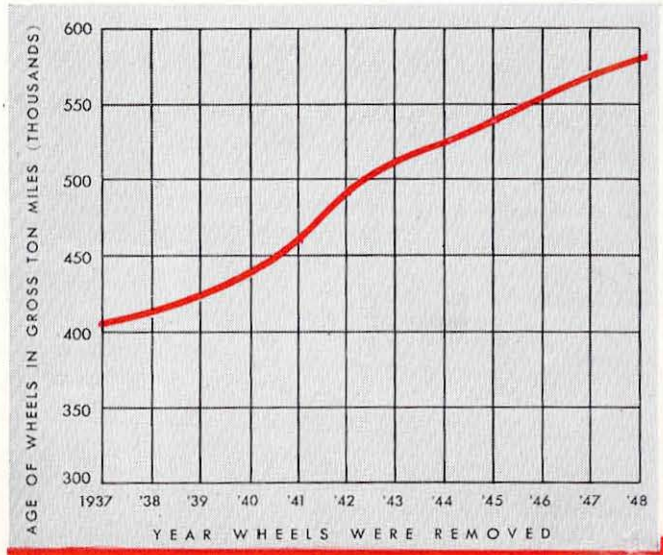
42% MORE SERVICE FROM Chilled Car Wheels

MORE WORK . . . in terms of greater ton mileage—that's the true yardstick of the extra measure of service you now get from Chilled Car Wheels. Figured that way, your wheel dollar rolls a lot farther today than it did ten years ago.

Let's look at the record. Back in 1938, Chilled Car Wheels removed from regular railroad cars showed an average of 410,000 gross ton miles of service. In 1948, however, wheels removed were delivering an average of 580,000 g.t.m.—an increase of 42% in service

America's railroads are working harder than ever these days . . . in stepped-up train speeds; in greater car loadings. And Chilled Car Wheels are measuring up to these extra demands with plenty to spare. For example: Average g.t.m. per wheel per year during 1930-1939 were 47,900 compared with 95,600 for 1942-1948—double the earlier average.

But that's not all. Looking ahead, you can safely expect even better performance from Chilled Car Wheels. Remember, wheels removed in 1948 were wheels cast in 1942, based on average age in years. We members of AMCCW have made some big improvements since then . . . in manufacturing methods . . . in testing and inspection. They all point the way to still greater service records from Chilled Car Wheels.



AVERAGE GROSS TON MILES OF SERVICE PERFORMED BY CHILLED CAR WHEELS REMOVED FROM REGULAR RAILROAD CARS IN EACH OF THE PAST 12 YEARS.

ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS

445 NORTH SACRAMENTO BOULEVARD, CHICAGO 12, ILL.

American Car & Foundry Co. • Canadian Car & Foundry Co. • Griffin Wheel Co.
Marshall Car Wheel & Foundry Co. • New York Car Wheel Co. • Pullman-Standard Car Mfg. Co.
Southern Wheel (American Brake Shoe Co.)

7548

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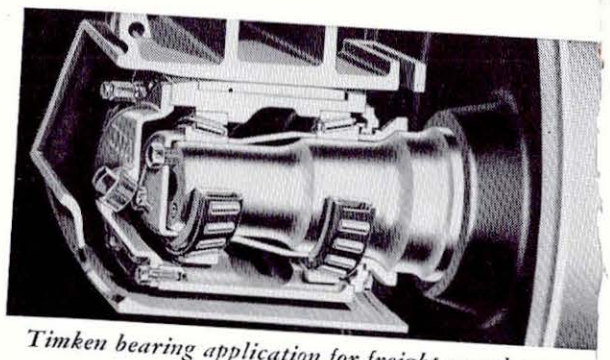
No oth
so fulf

1 USED ON FIRST COMPLETELY ROLLER BE EQUIPPED TRANSCONTINENTAL TRAIN!
In 1927 the Milwaukee Road's *Olympi* came the first transcontinental passenge to be completely equipped with roller ings—all of them Timken.

2 USED ON OVER 5000 PASSENGER CARS!
More passenger cars roll on Timken ings than on any other make of anti-fr bearing.

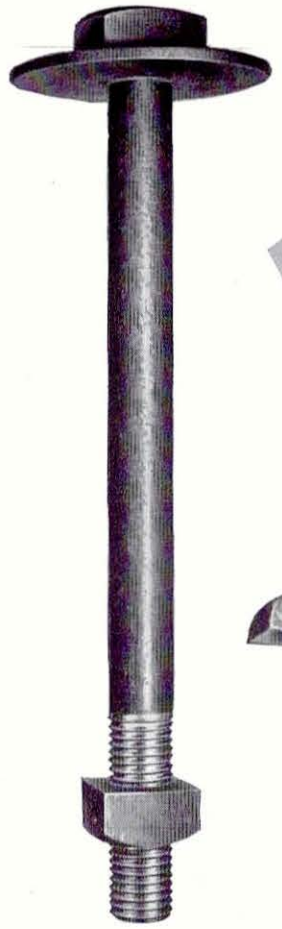
3 USED ON OVER 3500 FREIGHT CARS!
Timken has pioneered the use of roller ings on freight cars for faster, smoot transportation.



Timken bearing application for freight car changeove

NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLL

BOLTS for Bridge-Builders



BRIDGE BOLT
Wrench head. Forged washer under head eliminates need for combining machine bolt and cast-iron washer.

TIE BOLT
Used inverted to anchor wood ties, bolt running through tie. Hook head grasps flange of structural steel. Nut applied from top.

DRIFT BOLT
For all types of timber construction. Bodies: round or square. Heads: button, countersunk, square and headless. Points: wedge, semi-cone, full-cone and no-point.

TIMBER BOLT
Eliminates washer. Head offers minimum obstruction. Diamond-shaped lugs under head prevent bolt from turning.

TIMBER GUARD RAIL BOLT
For bolting timber guard rail. Easily gripped head. Intended for use in trestles and elevated structures.

BOLTS FOR BRIDGE-BUILDERS ARE PRODUCTS OF BETHLEHEM'S LEBANON, PA. PLANT

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.
On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation
Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL

Bethlehem supplies every type of Railroad Fastening

No oth
with
to

1 A TIMKEN BEARING IS SIMPLICITY ITSEL
A bearing which in itself takes *both* radia
thrust loads! No special thrust blocks or
ings to bother about.

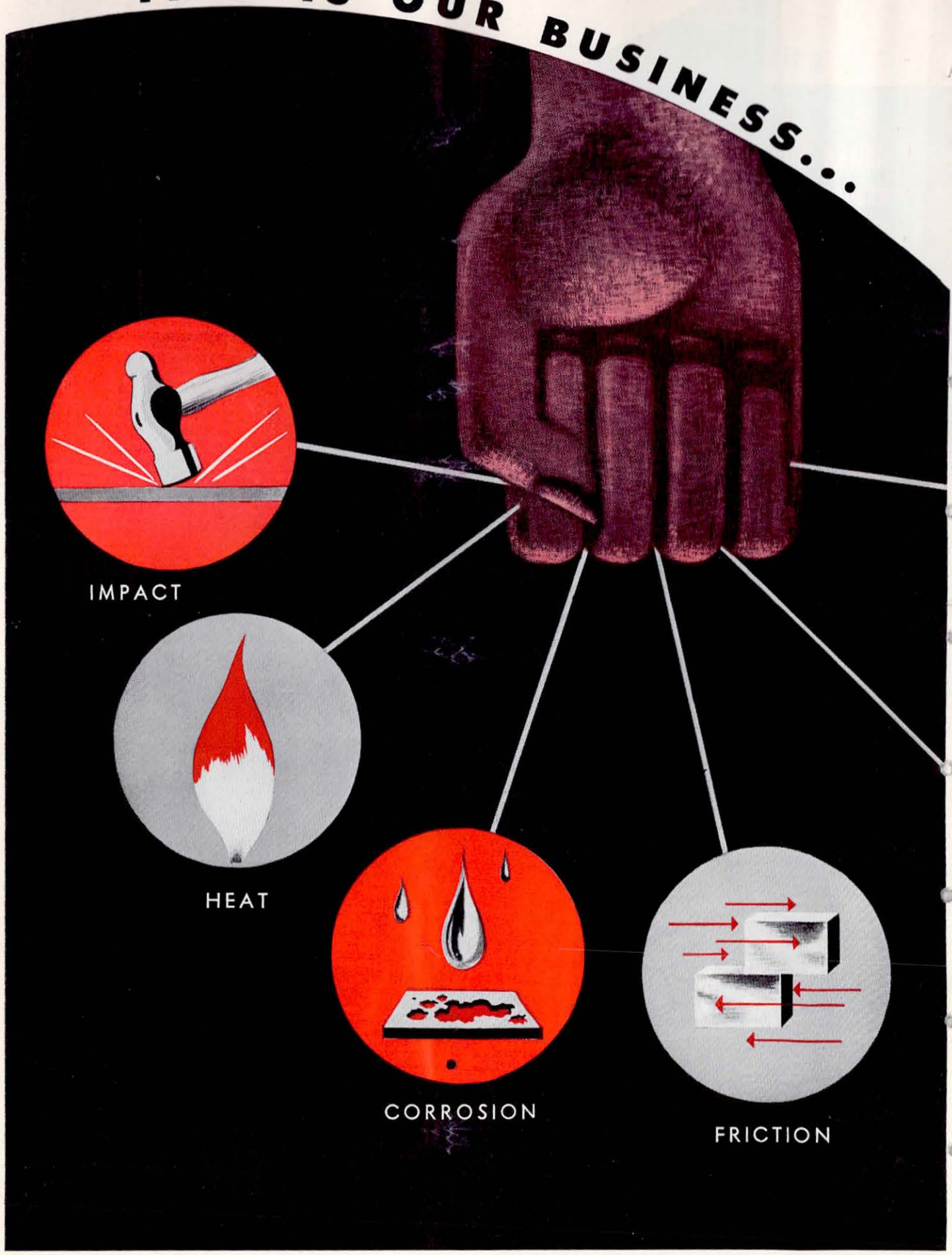
2 ROLLS ARE "MADE FOR EACH OTHER"!
Rolls are uniformly sized for their partic
cup and cone. Bearings last longer bec
each roll carries its full share of the load.

3 ROLLS STAY PUT—FOR LIFE!
Rolls are permanently retained in the b
ing assembly. They can't fall out dur
bearing changes and pick up dirt and g

4 NO ROLL SKIDDING OR SKEWING!
Wear is reduced, bearing life prolonged
cause the tapered rolls *can't* skid or skew. Ra
rib keeps the rolls in positive alignment.

5 ROLLS CAN'T SLIDE LATERALLY.
Due to its tapered design there's no latera
sliding friction in a Timken bearing.

**11 SPECIAL AXI
REQUIRED!**
No need to p



No other bearing so fully proved!

1 USED ON FIRST COMPLETELY ROLLER BEARING EQUIPPED TRANSCONTINENTAL TRAIN!
In 1927 the Milwaukee Road's *Olympian* became the first transcontinental passenger train to be completely equipped with roller bearings—all of them Timken.

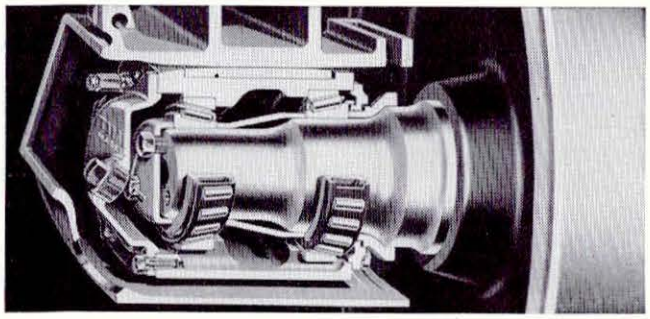
2 USED ON OVER 5000 PASSENGER CARS!
More passenger cars roll on Timken bearings than on any other make of anti-friction bearing.

3 USED ON OVER 3500 FREIGHT CARS!
Timken has pioneered the use of roller bearings on freight cars for faster, smoother transportation.

4 USED ON OVER 4000 STEAM LOCOMOTIVES!
And Timken is the one anti-friction bearing used almost exclusively for steam locomotive driving axles and crank pins — the toughest bearing jobs in the railroad industry.

5 ONLY ANTI-FRICTION BEARING USED FOR CHANGE-OVER FREIGHT SERVICE!
Union Pacific converted 300 stock cars to Timken bearings, liked them so much they converted 500 more!

For complete information about Timken railroad bearings write today to The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".



Timken bearing application for freight car changeovers.

TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.
TAPERED ROLLER BEARINGS

Pioneer of anti-friction bearings for railroads, Timken has remained the leader ever since. Today Timken has the largest staff of railroad bearing experts in industry: 64 men working exclusively in the railroad field on research, engineering and service problems.

NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▱ BEARING TAKES RADIAL ◫ AND THRUST →◫← LOADS OR ANY COMBINATION ✳

IT'S NEWS in the Electrical World, and it's

BRAND-NEW PROOF OF THE VERSATILITY OF ADLAKE RELAYS

The new steam generator control shown here was built to the specifications of the Superheater Company, Inc. It posed special problems of timing, load and control, since it was originally designed for use on Diesel Locomotives. Adlake Relay engineers provided a first-class solution to these problems, as well as brand-new proof that Adlake Mercury Plunger-Type Relays are truly *versatile!*

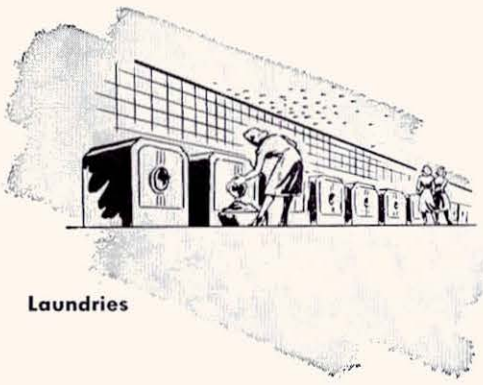
If you have a problem involving relays, the same Adlake engineering skill is at your disposal! As in this case, where standard Adlake Relays were modified to meet requirements of the installation, we will custom-build the relay you need if you don't find it, ready-made, in our relay catalog.

Take advantage of this offer! And remember the advantages that all Adlake Relays already provide, for any relay job:

- **HERMETICALLY SEALED: Dust, dirt, moisture, oxidation and temperature changes can't interfere with operation.**
- **MERCURY-TO-MERCURY CONTACT prevents burning, pitting and sticking.**
- **SILENT AND CHATTERLESS -- NO MAINTENANCE REQUIRED**
- **ABSOLUTELY SAFE -- ARMORED AGAINST IMPACT AND VIBRATION**

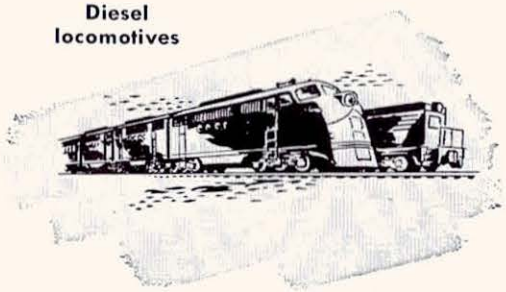
WRITE TODAY for free, illustrated Adlake Relay folder. No obligation, of course. Address: 1109 No. Michigan, Elkhart, Indiana.

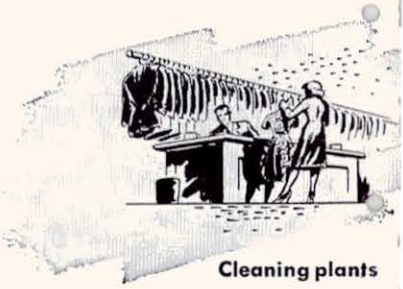
These are some uses of the new control:



Laundries

Diesel locomotives



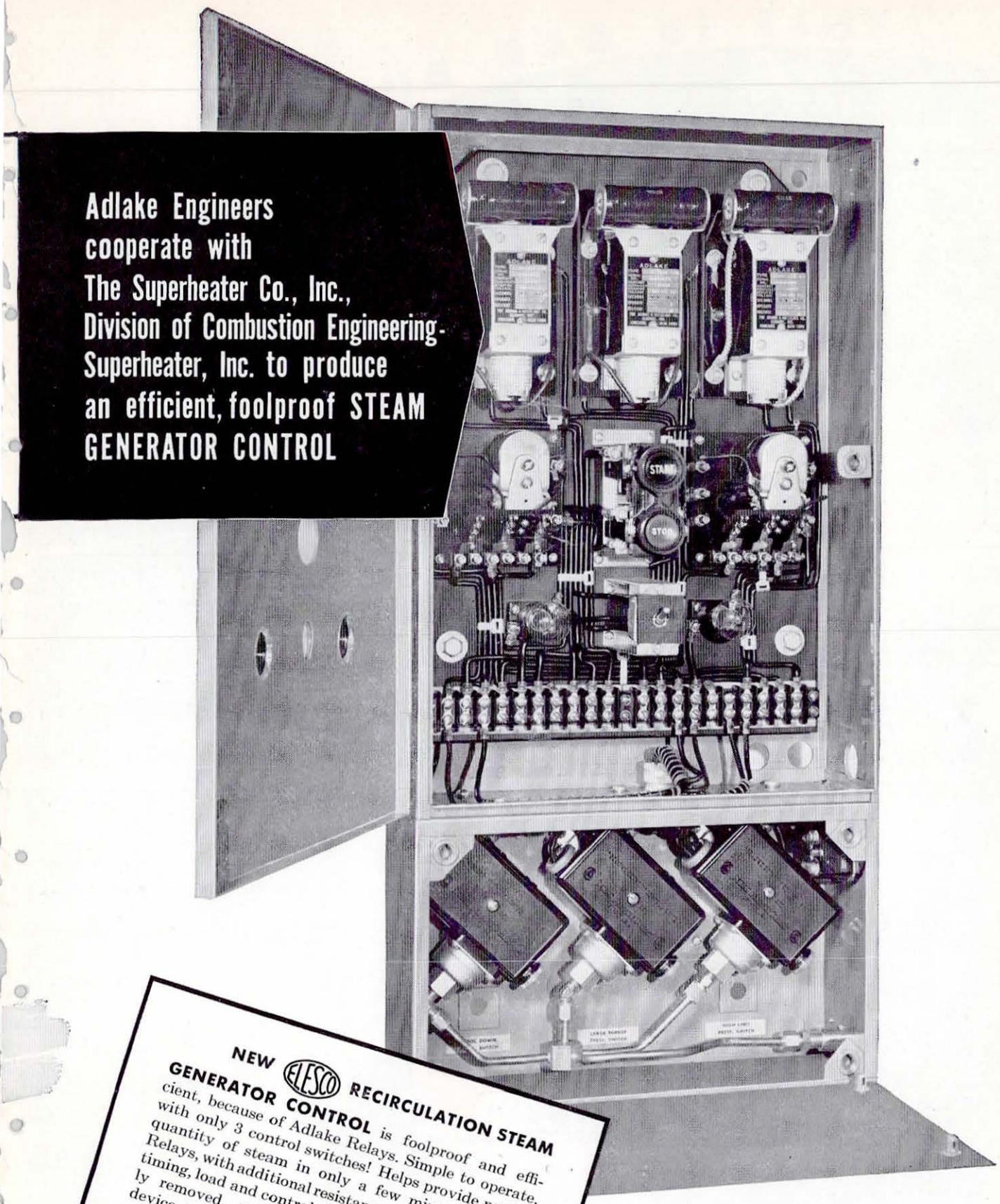


Cleaning plants

THE Adams & Westlake COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago

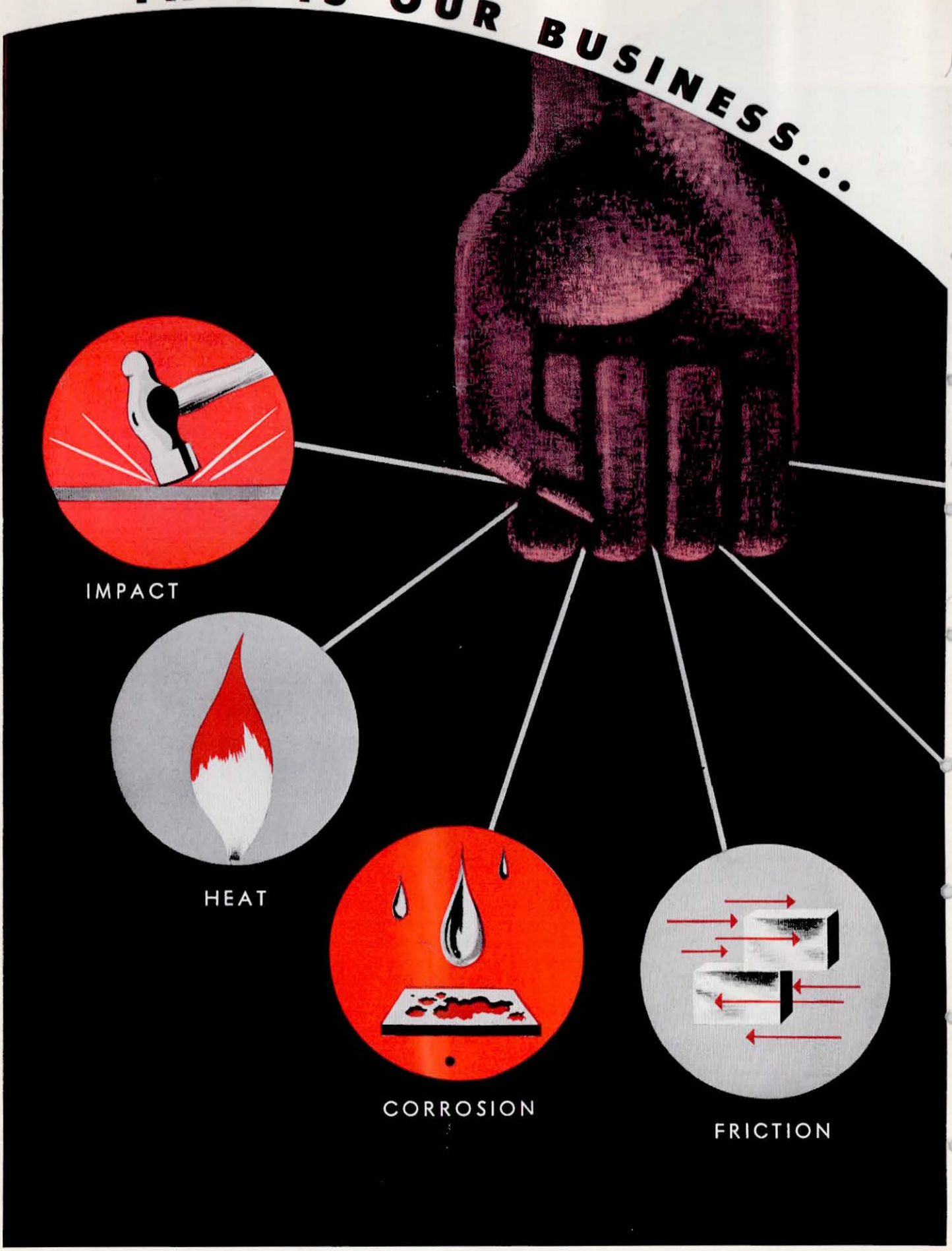
Manufacturers of Adlake Hermetically Sealed Mercury Relays for Timing, Load and Control Circuits



Adlake Engineers cooperate with The Superheater Co., Inc., Division of Combustion Engineering-Superheater, Inc. to produce an efficient, foolproof STEAM GENERATOR CONTROL

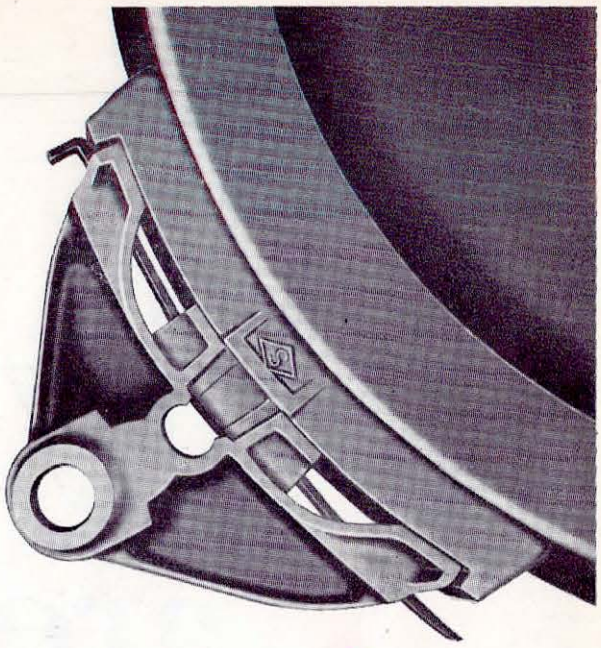
NEW ELESCO RECIRCULATION STEAM GENERATOR CONTROL is foolproof and efficient, because of Adlake Relays. Simple to operate, with only 3 control switches! Helps provide needed quantity of steam in only a few minutes. Adlake Relays, with additional resistance coil built in, handle timing, load and control. Relays are easily and quickly removed, yet because of a special "gripper" device their placement is unaffected by vibration.

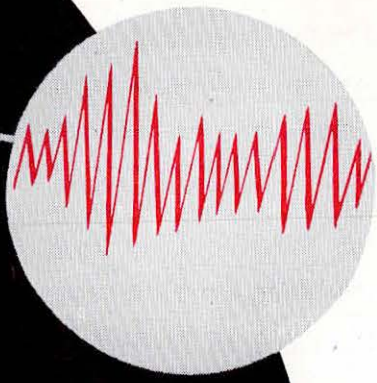
Adlake TRADE MARK


THIS IS OUR BUSINESS...
IMPACT
HEAT
CORROSION
FRICTION

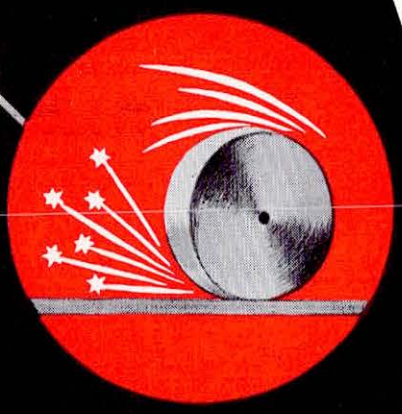
...AND IT MEANS

Better Brake Shoes FOR You





VIBRATION



ABRASION

Forty-six years of broad experience in the manufacture of parts for industry are behind every present-day product of the American Brake Shoe Company.

This experience is reflected in brake shoes that are highly resistant to impact, heat, and vibration and which give the high coefficient of friction required by today's trains . . . also brake shoe lockeys with high resistance to corrosion for long and repeated use . . . and a large variety of abrasion-resistant castings.

Continuing research into the causes and control of industrial wear is an important part of our business. It's good business for you, too, because out of such study come products that last you longer and serve you better. The American Brake Shoe Company, 230 Park Ave., New York 17, N. Y.

AMERICAN Brake Shoe COMPANY

BRAKE SHOE AND CASTINGS DIVISION

7476

Why are some prices *Still High?*

We reprint at the right an advertisement published by N.W. Ayer & Son, Inc., as a service to American business. We believe it is well worth studying, as a sound and simple exposition of the complex, interlocking cost factors that affect the operations of every producer of goods or services. What is said here aptly defines the cost problems of America's progressive railroads —and, in no less measure, of Pullman-Standard.

Prices of many articles are still high. They have gone up and they stay up.

That is because *costs* are still high.

For, contrary to some belief, manufacturers have a *limited control* over the prices they must charge.

Most of any price is made up of cost. Into the price of a cake of soap, a washing machine or a Diesel engine* go the costs of raw materials, labor, power, rent, insurance, taxes, machinery, selling expense and other charges. The manufacturer does not control the cost of these items; he is a funnel through which these costs flow on their way to the public.

To all these necessary costs the manufacturer adds a profit—much less than people think, and only a very small fraction of the selling price.

If costs rise, as they have during the last ten years, prices rise. No article can be sold for less than it costs to make.

But if costs go up, and prices follow, when is the limit reached?

The limit is reached when the public is no longer able or willing to buy. For in the long run, the public writes the price tag; only the public can compel lower costs; and only lower costs can lead to appreciably lower prices.

Lower prices are always the goal of intelligent management. There is no altruism in this. Lower prices widen a market. They make two customers grow where only one grew before.

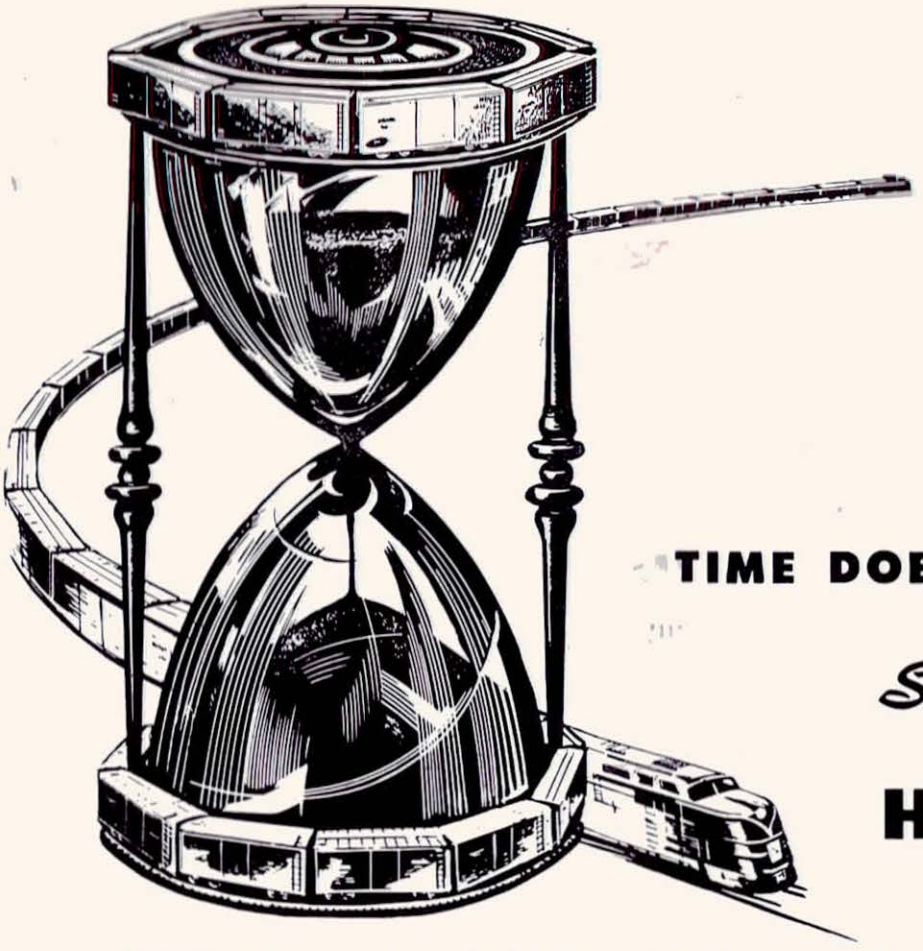
If present high costs can be reduced, you will find that prices will follow quickly.

**Or a railway car.*

Pullman-Standard

CAR MANUFACTURING COMPANY

CHICAGO • NEW YORK • CLEVELAND • WASHINGTON, D. C. • PITTSBURGH • BIRMINGHAM
WORCESTER, MASS. • *SAN FRANCISCO SALES REPRESENTATIVE: MARK NOBLE*



TIME DOES NOT AFFECT

Streamlite

HAIRINSUL

TIME—frequently called "the great destroyer," has yet to destroy STREAMLITE HAIRINSUL. Neither has it impaired its high insulating efficiency.

Time after time, all-hair insulation, removed from refrigerator cars after 20 or more years of service, has been reused in new cars without need for further processing.

Here are some of the many acknowledged reasons why STREAMLITE HAIRINSUL is the leading car insulation. Complete data will be sent upon request.

LOW CONDUCTIVITY. Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour, per degree F., per inch thick.

LIGHT WEIGHT. Advanced processing methods reduce weight of STREAMLITE HAIRINSUL by 40%.

PERMANENT. Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.

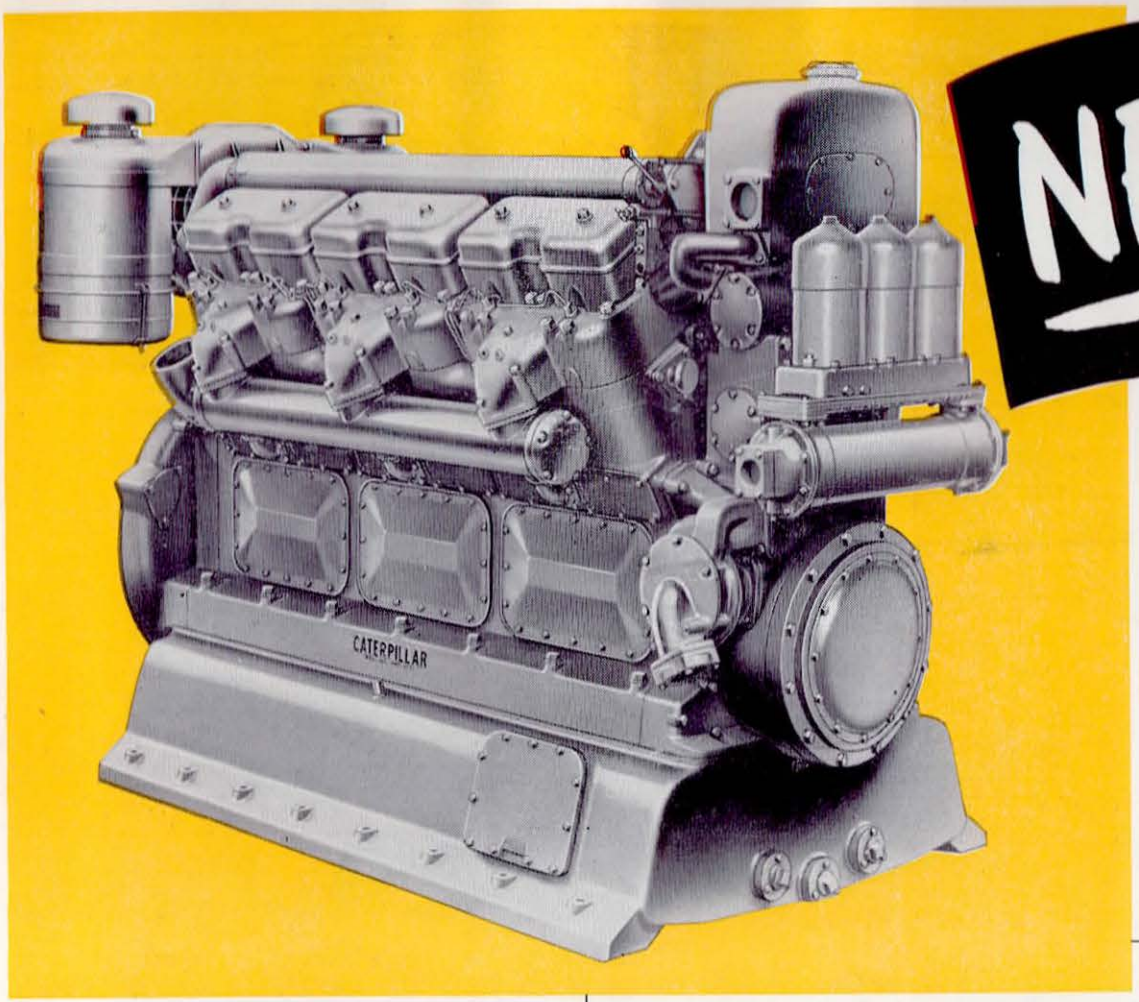
EASY TO INSTALL. Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.

COMPLETE RANGE. STREAMLITE HAIRINSUL is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other weights and facings are available.

HIGH SALVAGE VALUE. The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

Dept. H96 Merchandise Mart Chicago 54, Ill.

SAFE
SOUND • ECONOMICAL
in daily road service on many of America's leading railroads
LATERAL VERTICAL
SCULLIN L-V TRUCKS
CUSHIONED MOTION
50 YEARS' PROGRESS
SCULLIN STEEL CO.
SAINT LOUIS 10, MISSOURI
NEW YORK • CHICAGO • CLEVELAND • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D. F.

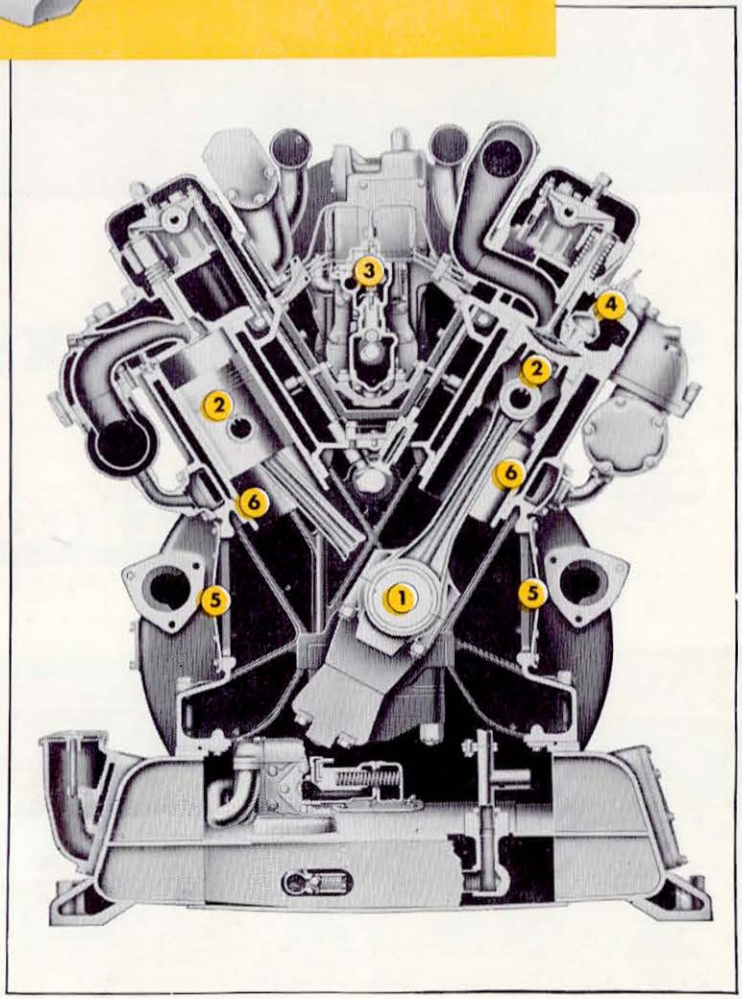


The 500-horsepower D397—biggest of the new "Caterpillar" Railroad Diesels. D386—400 horsepower. D375—335 horsepower. D364—265 horsepower.

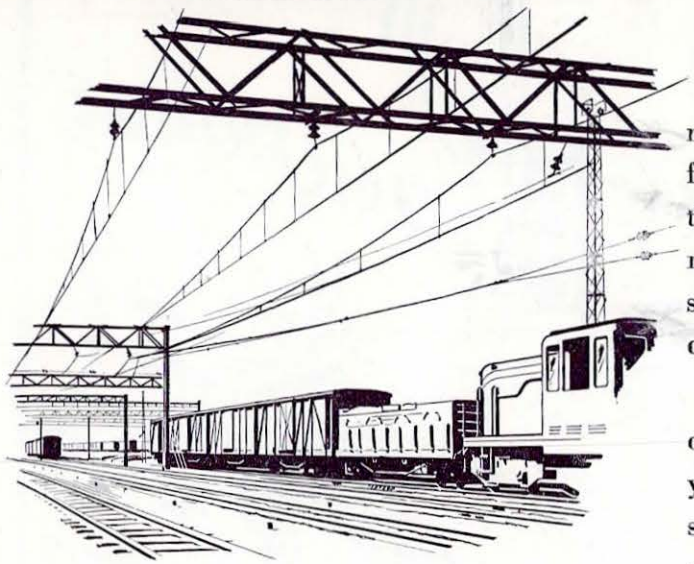
•

DESIGNED FOR STURDINESS, EFFICIENCY, LONG LIFE—AND EASY SERVICING

1. Extra large, induction-hardened crankshaft.
2. Oil-cooled, aluminum alloy pistons.
3. Interchangeable fuel injection pumps.
4. Non-clogging, single-orifice, fuel injection valves.
5. Large inspection openings for removal of pistons, rods and bearings.
6. Induction-hardened, alloy iron, wet type cylinder liners.



BIGGER "CATERPILLAR" DIESELS FOR BIGGER RAILROAD JOBS

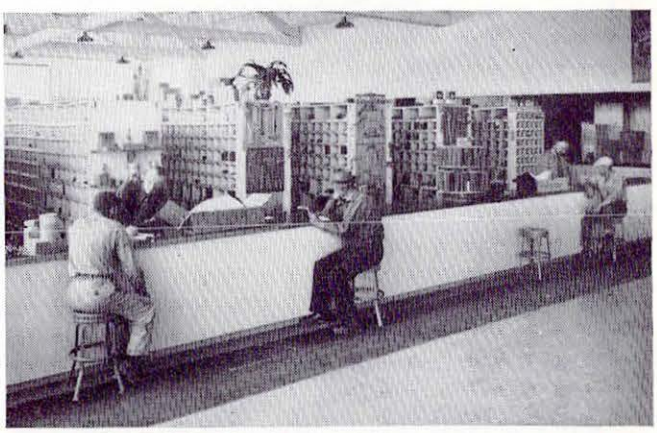


THE wide popularity of "Caterpillar" Diesel Engines is convincingly attested by the fact that they are powering more than 90 per cent of all 44-tonners on Classes I, II and III railroads.

With the addition of four great new models, "Cat" Diesels are now being built up to 500 horsepower. Thus, these familiar Railroad Diesels become available for use in an extended range of locomotives and railcars . . . bringing with them the outstanding economy, dependability, long life, and easy servicing that have been so thoroughly proved in other models.

These new Diesels are built in the world's most modern engine factory—where precision manufacture and inspection controls are used to build the finest product of its kind. The designs are a natural development of current models of the same bore and stroke, checked by many years of careful research.

Specify "Caterpillar" Railroad Diesels when ordering new railcars and new locomotives, and you'll be sure of maximum availability and unsurpassed performance. For complete engine specifications, write to Railroad Power Division, CATERPILLAR TRACTOR CO., PEORIA, ILL.



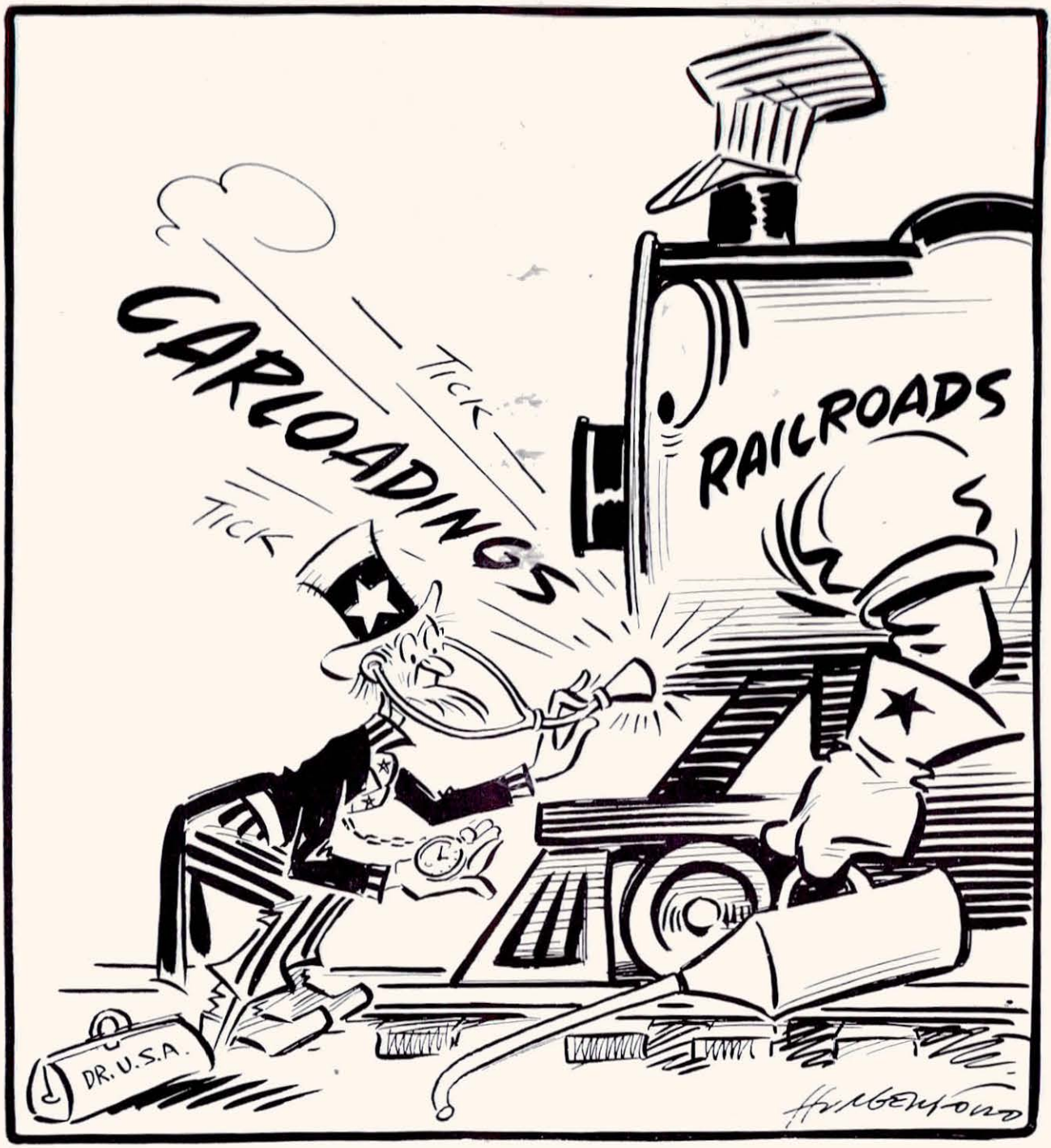
COMPLETE PARTS AND SERVICE FACILITIES EVERYWHERE
—making it unnecessary for a railroad to tie up its own funds in parts stocks.

CATERPILLAR
REG. U. S. PAT. OFF.
RAILROAD DIESELS

ENGINES
TRACTORS
MOTOR GRADERS
EARTHMOVING EQUIPMENT

WHEN YOU THINK OF RAILROAD POWER, THINK OF THE BIG "CAT" DIESELS

Diagnosing the Nation's Economic Health —By Hungerford



Watch for other railroad cartoons by Mr. Hungerford

A cut of suitable size may be obtained at cost by anyone wishing to reproduce the above cartoon.

Address requests to:

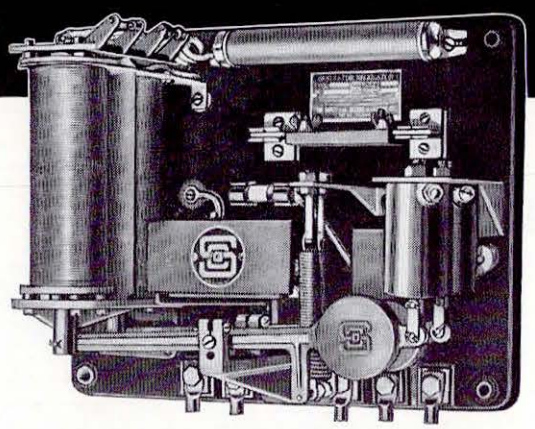
Edgewater Steel Company,
P. O. Box 478, Pittsburgh 30, Pennsylvania.

Control

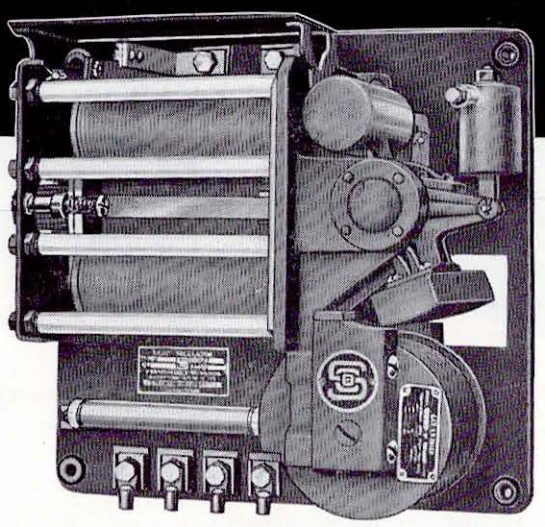
VOLTAGE
CURRENT
SPEED

Realize the Full Value of Your Equipment

WITH



TYPE S75EA CARBON PILE REGULATOR



TYPE S700E CARBON PILE REGULATOR

SAFETY

Carbon Pile Regulators

AND

Reverse Current Relays

Avoid divided responsibility!
For complete car lighting
and power equipment —
STANDARDIZE WITH SAFETY

THE SAFETY CAR HEATING AND LIGHTING COMPANY INC.

NEW YORK · CHICAGO · PHILADELPHIA · ST. LOUIS · SAN FRANCISCO · NEW HAVEN · MONTREAL

● **SAFETY COMPANY PRODUCTS INCLUDE: Complete Air-Conditioning Equipment • Genemotors • Generators • Motor Alternators Regulators • Lighting Fixtures • Switchboards • Fans • Parcel Racks • Generator Drives.**

More and More Steel— Better and Better Cars

NAILABLE STEEL FLOORING

Marks Another Great Advance In Boxcar Development

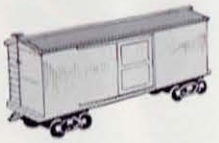
Step by step, unit by unit, steel won its way in boxcar construction until it had supplanted less durable materials in all main units but one. The floor—because blocked loads must be held by nailing—remained unchanged. . . . Then came NAILABLE STEEL FLOORING—combining superior strength and easy nailability—and now the boxcar, in all parts subjected to stress and hard use, is truly a *steel* car.

Just as each added use of steel—in underframes, ends, body framing, sheathing and roofs—lowered costs of operation and maintenance, so does its newest use in NAILABLE STEEL FLOORING. You can't beat steel for resistance to stress and wear —you can't equal NAILABLE STEEL FLOORING for durability, freedom from breakthroughs, and maximum protection for either blocked or loose freight.

PATENTS PENDING

Evolution of the Boxcar

CHIEFLY WOOD

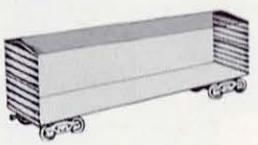


In 1880, steel was used in boxcars only in trucks, truss rods, couplings, fittings and accessories. Cars of those days needed frequent repairs, were short lived.

STEEL UNDERFRAMES

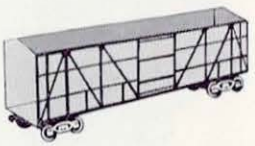
Steel became a major factor in boxcar construction when it began to be used in underframes. As a result of its greater strength, downtime for repairs and maintenance costs were substantially reduced.

STEEL ENDS



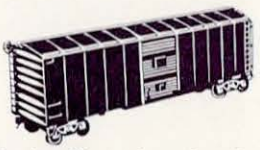
Breakthroughs caused by the sliding of ladings upon sudden stops were common until steel ends came into use. Again, the greater strength of steel resulted in reduced costs.

STEEL BODY FRAMING



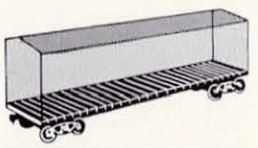
The more steel, the more strength—and body framing of steel worked a further reduction in maintenance and repair costs.

STEEL ROOFS AND SIDES



With the addition of steel side sheathing and steel roofs, the only non-steel part subject to stress and wear was the floor. Because nailability was essential, it remained unimproved.

NAILABLE STEEL FLOORING



Here is the latest important step in the gradual change to steel construction. NAILABLE STEEL FLOORING, made of corrosion-resisting NAX HIGH-TENSILE steel, has proved its excellence—by providing a superior surface for all types of boxcar freight, and by standing up under heavy freight and modern mechanical handling equipment.

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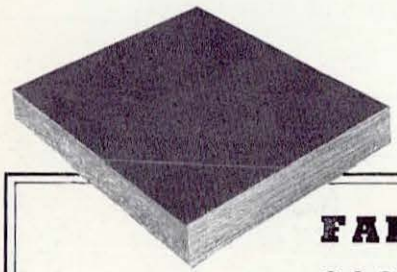

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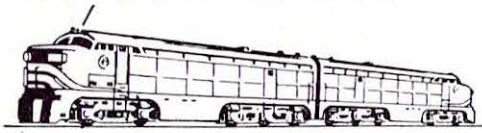

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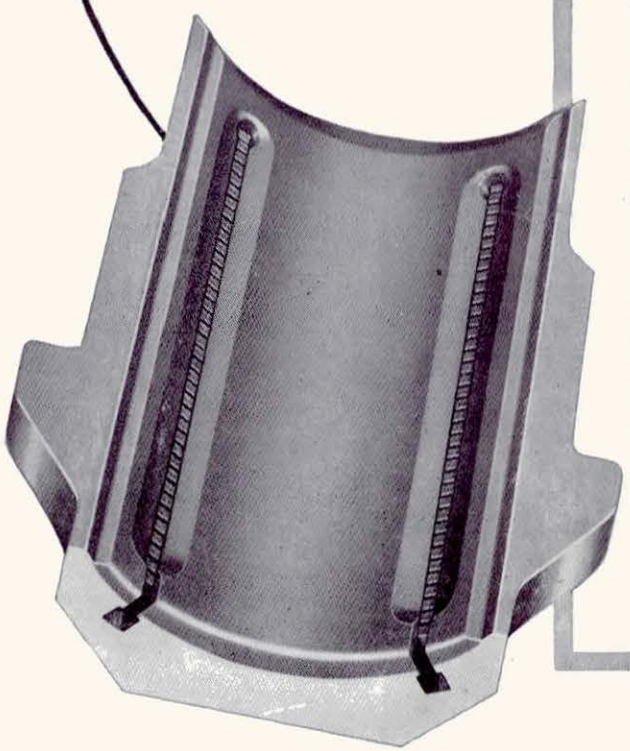

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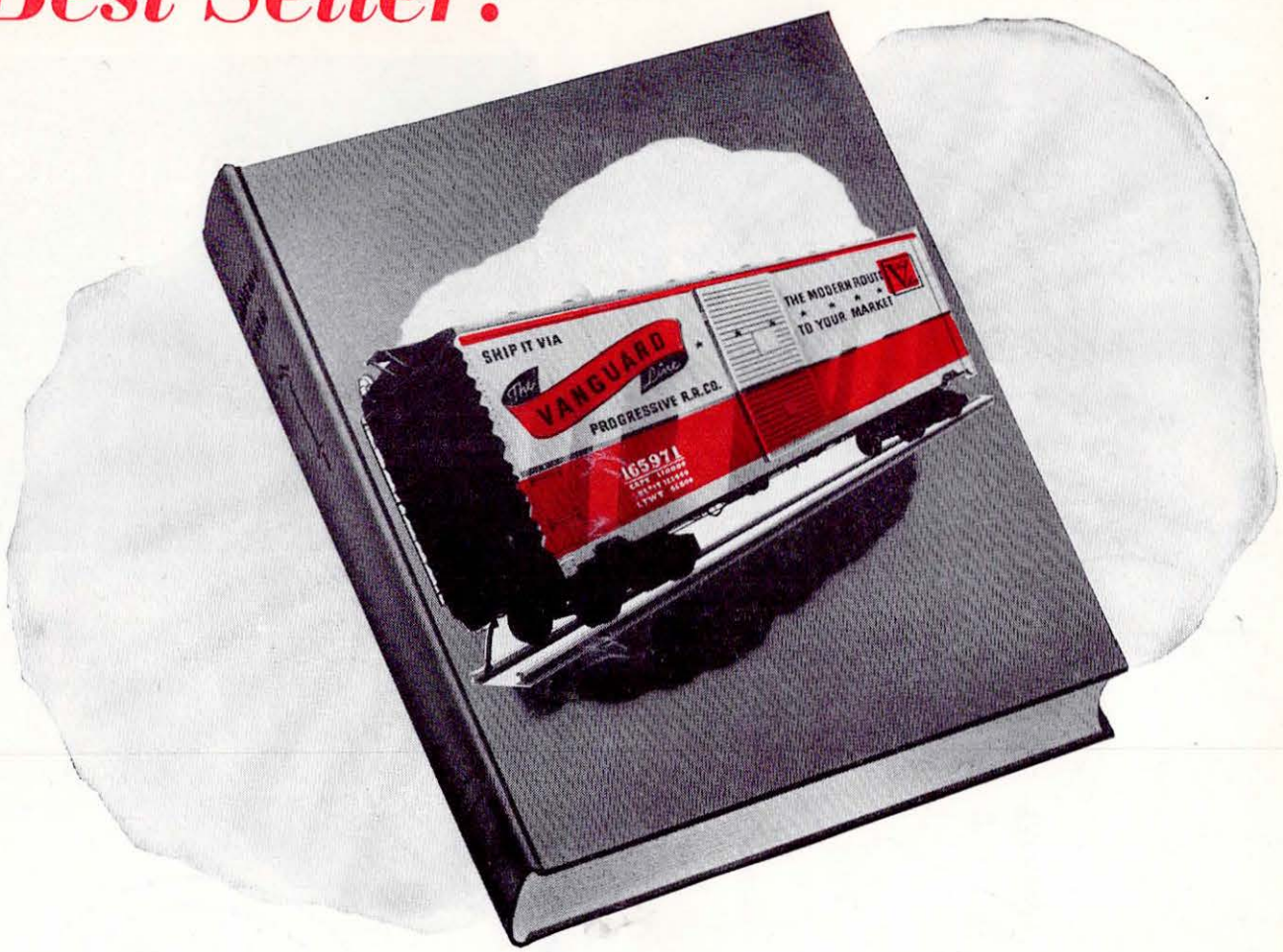

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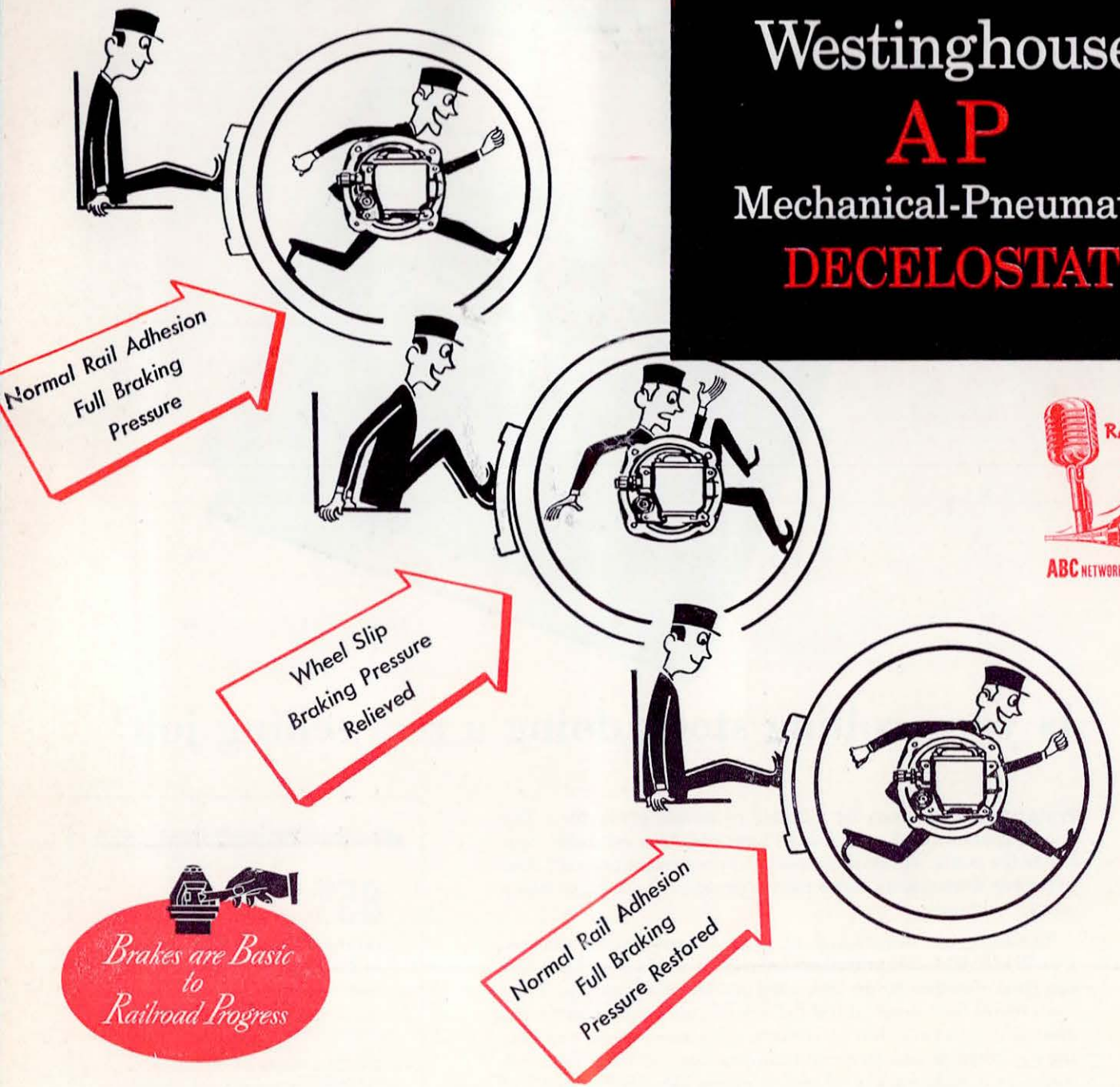

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Vol. 126, No. 23 June 4, 1949

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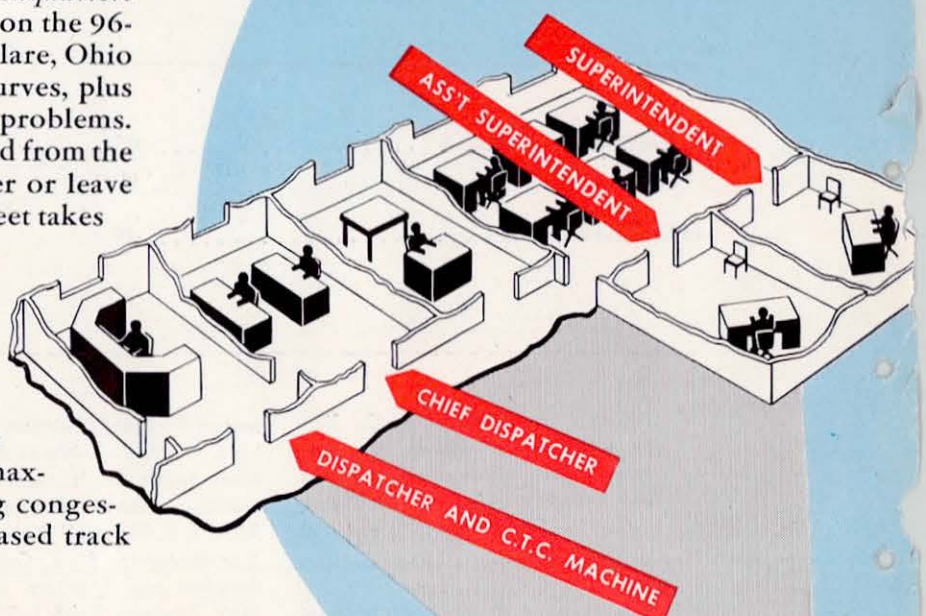
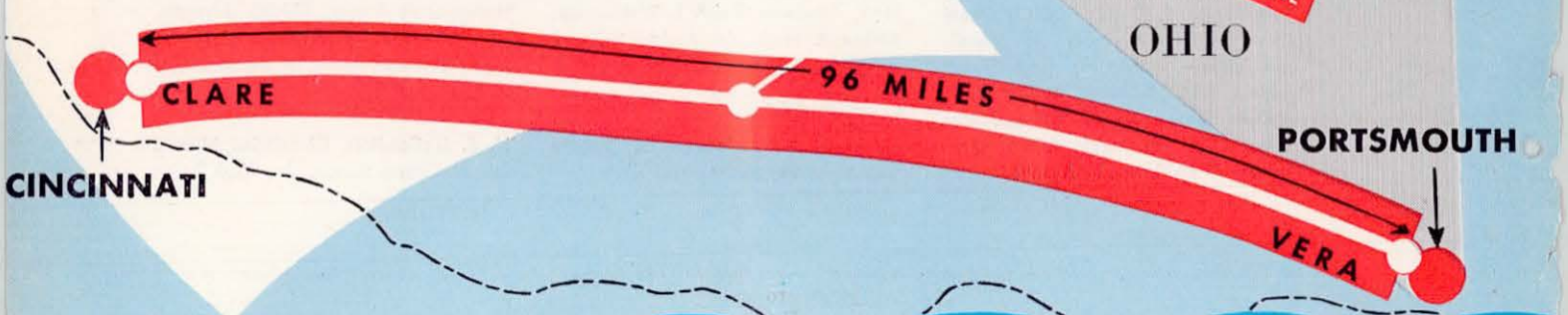
And, with *control concentrated at division headquarters,* the N&W is able to obtain maximum advantages of C.T.C. . . . eliminating congestion, securing on-time performance, increased track capacity, and lowered operating costs.





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WEEK AT A GLANCE

INVESTIGATION OR INQUEST? The announcement, reported in this week's News pages, that a Senate subcommittee is going to undertake a thorough investigation of the nation's transportation situation, *can* be good news—provided the investigators observe a few simple essentials which are plainly set forth in our leading editorial. But if the investigators permit the record to be loaded with verbose irrelevancies, by those who are more interested in concealing than in revealing the true facts, then the investigation is more likely to resemble an autopsy on the lifeless body of private enterprise in transportation—with similar inquests into the death of private enterprise in many other businesses sure to follow.

MORE REVENUE; FEWER CLAIMS: A new type of freight car for bulk loading of flour and other fine-grain commodities —which is expected to double normal revenue loading and virtually eliminate loss and damage claims—is in test service between Toledo and Atlanta. The car, designed by the National Fitch Corporation, is described on page 40.

"SELLING" SAFETY: The fact that safety must be "sold" to employees was one of many important aspects of the over-all railroad safety problem developed at the A.A.R. Safety Section's 29th annual meeting, held last week at St. Paul, Minn. An account of the meeting, with excerpts from addresses and committee reports, begins on page 41.

WHERE TO PUT IT? Storage space rather than car supply is the chief problem in connection with movement of this year's bumper winter wheat crop, according to Arthur H. Gass, chairman of the A.A.R.'s Car Service Division. This and other observations in Mr. Gass' latest monthly review of the "National Transportation Situation" are summarized in the News columns.

GOOD THINGS OFTEN COME IN SMALL PACKAGES: For obvious reasons, facilities for efficient and economical maintenance and repair of Diesel-electric locomotives are becoming increasingly important on many American railroads. Effective evidence that such facilities, when necessary, can be relatively modest, both in cost and size, is furnished by the Detroit, Toledo & Ironton's new Diesel shops at Flatrock, Mich. The illustrated description of this facility, which starts on page 36, shows that it contains practically all the design features found in much larger shops, and a number of new features as well.

CANADIAN TRANSPORT STUDY: Canada, like the United States, has a transportation problem—created in large measure, like our own, by politics, sectional rivalries, and subsidies to uneconomic transport agencies. The whole situation is now under consideration by a royal commission, to which the Canadian Pacific and Canadian National have submitted outline briefs of their respective positions. Because the general Canadian problem is so similar to that in this country, and because the two outlines contain some pretty sound reasoning on transport economics in general, they are reported in some detail in our News section.

THE EMPLOYEE'S PART IN COST CONTROL: True cost control in the railroad industry doesn't stop with high-level management—it goes all the way down the line to the shop mechanic and the section hand. Management's greatest responsibility, therefore, is to make the individual worker realize the extent to which his own welfare depends on controlled costs and high production standards. This point was developed in a recent address, abstracted on pages 47-48, to the New England Railroad Club by C. I. Clugh, Altoona works manager of the Pennsylvania.

DIESEL TRAINS FOR COLOMBIA: An illustrated feature article starting on page 32 describes a three-car Diesel-powered train recently completed by the Davenport-Besler Corporation for the National Railways of Colombia.

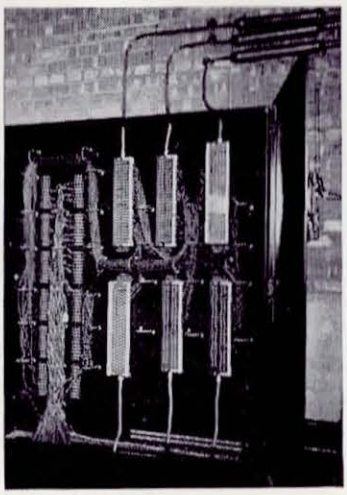
GOOD CASE FOR MECHANIZATION: When mechanization of freighthouse platform operations—plus modern communications—can eliminate congestion, speed service, and reduce costs, the case for such mechanization is pretty strong. The Santa Fe has accomplished all of those objectives at Kansas City, Mo. How they were achieved is related in an illustrated article beginning on page 44.

ANOTHER FRONT: That indefatigable persecutor of the railroad industry, the Department of Justice, opened a new front last week in its war with the railroads, with the Northern Pacific as its target. The basis of the department's suit against that company is outlined in the News.

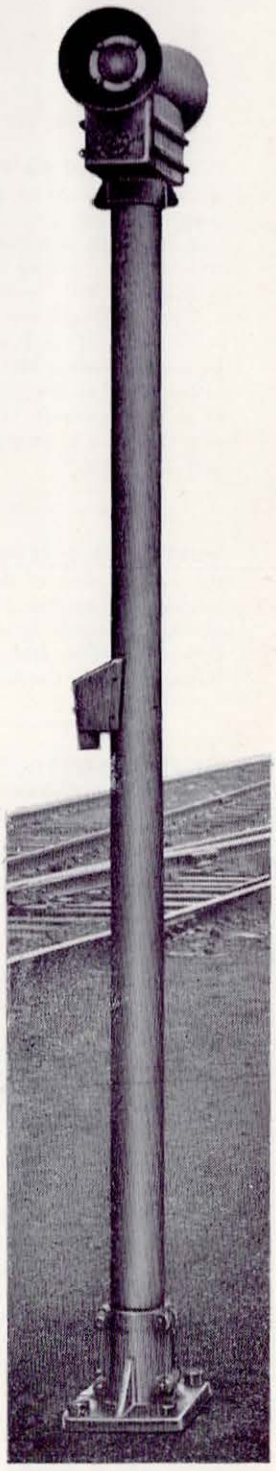
IT'S NOT GOING TO BE A PRIVATE FIGHT: The "reparations" cases brought against the railroads by the Justice Department apparently aren't proving as politically popular as the department evidently hoped they would. Probably, too, department attorneys know their "case" is far weaker than they try to pretend in their virulent anti-railroad press releases. At any rate, the department wanted to make the cases a private fight—almost a star-chamber proceeding—before the Interstate Commerce Commission. Hence, the commission's laudable decision, reported in the week's News, to let the various employee brotherhoods, the Railroad Security Owners' Association, and the Transportation Association of America intervene in the cases—all on the side of the railroads—represents at least a minor setback for the department.

OVER 37 MILES OF OKONITE UNDERGROUND CABLE
used in
COUNTRY'S LARGEST YARD LOUDSPEAKER SYSTEM

Yardmaster at loudspeaker control panel in one of the two communication towers.



Cable terminal box in base of same communication tower.



2-way talk-back loudspeaker on 8-foot mast in yard.

7557

New B&O Barr Yard Near Chicago

MODERN COMMUNICATION facilities are an outstanding feature of the Baltimore & Ohio's new Barr Yard at Riverdale, Illinois, near Chicago. These money-saving facilities include a network linking 197 2-way talk-back loudspeakers and 50 paging speakers for directing switching crews from two communication towers; complete telephone and printing telegraph service; and an independent intercommunicating system between offices in the yard. Over thirty-seven miles of Okonite underground cables were used on this installation — 188,000 feet of Okovox-Okoprene Cable and 25,000 feet of Okolatex-Okoprene Cable, both types steel-tape armored.

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INVESTIGATION OR INQUEST?

The announcement that a subcommittee of the Senate committee on interstate and foreign commerce is going to conduct a comprehensive investigation of the nation's transportation situation may be good news or not—depending on whether the investigators will insist that testimony be limited to the relatively simple fundamentals or, on the contrary, will permit the record to be burdened with verbose irrelevancies designed to conceal the basic facts rather than reveal them. The monumental confusion of detail and lack of focus upon the real issues which characterized the reports of the Coordinator and of the Board of Investigation and Research upon the comparative economy of the several forms of transportation should be a solemn warning to all future investigators. One more such maladroit and intellectually costive inquiry and the next one may have to be an autopsy upon private enterprise in transportation.

Must Develop Practical Remedies

Those responsible for the conduct of the proposed investigation can avoid the errors of their unsuccessful predecessors by the observance of a few simple principles, the general tenor of which should be somewhat as follows:

The purpose of the inquiry should be to develop practical remedies for present-day problems, and not to determine what is metaphysically "fair" or to punish today's corporate management for the shortcomings of its predecessors. The transportation situation which confronts the country is one of wasteful duplication of facilities; arbitrary diversion of traffic from the more economical agency to those less economical; and the acute danger that the only genuine common carrier agency—i.e., the railroads—may no longer be able to finance adequate improvements to fixed property from private sources.

The labored effort to draw a parallel between the land grants assigned to some of the pioneer railroads and present-day subsidization of operating expenses of air lines (by retroactive increases in mail payments), and of trucks and barges (by freedom in whole or in part from the payment of maintenance-of-way expenses), sheds no light on any present-day problem. Even if the parallel were accurate, as of course it is not, it is not—or should not be—the function of practical-minded 1949 legislators to inflict vicarious punishment on the railroad builders of a century ago in the persons of their present-day successors.

Instead, it is the duty of the legislators to provide a political framework for the transportation industry in 1949 which will encourage economy of capital rather than its dissipation; which will induce traffic to flow in the channels of the greatest economy, rather than those of the least; which will preserve common carrier service under private financing; and which will not deprive the nation of a reliable

reserve of transportation capacity in the event of a military emergency. Congress will find its hands tolerably full if it gives adequate attention to these pressing practical problems, without indulging in the doubtless pleasurable exercise of debating the niceties of corporate ethics of the Truman era compared to those of the regime of U. S. Grant.

Reduce or Remove Variation

The confusion in transportation today arises inevitably from the varying degrees to which self-support, regulation and taxation are imposed upon the various agencies—hence, it follows that the confusion can be reduced only if the variations in self-support, regulation and taxation are reduced or removed altogether. This assertion is susceptible to proof, but to anyone familiar with transportation, it is so self-evident that argument would be superfluous. It should be the business of a competent investigation to adorn the skeleton of the argument with the flesh and blood of convincing fact—because an intelligent legislative program for transportation has to be "sold," not merely to experienced transportation people, but to the lay public. Unless the case for remedial action is expressed in terms carrying conviction to the layman, self-seekers will inevitably take advantage of the omission to create further confusion in popular understanding—thus making politically hopeless any chance for corrective legislation.

For example, it is often plausibly argued that a large railroad has more opportunity for monopolistic practices than a little truck operator with three or four trucks—hence a difference in the comparative degree of regulation as between the two is justified. This specious contention neglects to proceed to the less obvious but more pertinent conclusion that this practice, when taken in the aggregate, results in an overregulated railroad industry and an underregulated trucking industry, to the great disadvantage of the former in claiming the share of traffic to which—in the public interest—it is economically entitled.

The unwary are likewise asked to believe that highways "benefit" the community as well as highway users, and, therefore, should be a charge on general taxes and not entirely on the users. Those who advance this argument neglect to explain why a *truckload* of steel moving from Pittsburgh to Detroit should have a part of its roadway costs paid from general taxes while a *carload* of steel moving by rail between the same points has all its roadway costs assessed against the shipper. They also neglect to explain why the roadway upon which the truckload of steel is moved is not taxed while the roadway on which the carload moves is heavily taxed. The task of the investigators is not that of seeking justification for the *status quo* in the relationship of the several agencies of transportation to each other—but to discover wherein a *status quo* which is an obvious failure needs to be changed.

The investigators might also profitably inquire how any kind of coordination among the several agencies of transportation may be expected to develop when common ownership of different agencies is so vigorously discouraged by legislators and regulators alike. The beneficial coordination between bus and street car service which obtains in most municipalities was certainly not brought about by the pursuit of any such fatuous policy.

In regulation or other government interference with business enterprise, the safest rule to follow is to establish the conditions which would obtain under free competition. The excuse for governmental invasion of some parts of the economy is that, in these particular sectors, the ordinary rules of competitive free enterprise do not operate fully. It follows logically, then, that the function of government interference should be to stimulate the conditions of free competition insofar as possible. This principle is a particularly important one to bear in mind when government provides facilities in competition with those of private investors—because, if government-owned plant is made available at less than cost, the inevitable tendency must be to put the private competitors out of business, regardless of their superior economy.

An investigation of transportation which will insist on tackling practical problems by practical means will serve a useful purpose. Any other kind would be worse than a waste of time. There is no "solution" to the nation's transportation problem, under private enterprise, which does not envision the raising of the average price of railroad equities to more than 100 on the Dow-Jones average.

HOW MUCH SUPERVISION?

Maintenance-of-way labor on the railroads is becoming increasingly expensive. After the 40-hr. week goes into effect on September 1, the cost of this service will climb into new high territory. The dearer a service becomes the greater the care that must be exercised in its use to insure that a dollar's worth of value will be obtained for each dollar spent.

One of the possibilities for increasing the effectiveness of maintenance-of-way forces lies in better and more intensive supervision of track and bridge and building gangs—the kind of supervision that will minimize wasted time and make certain that each man-hour that goes into a timekeeper's book is represented by its equivalent in human energy actually applied to the track or a structure in a manner and place calculated to produce the greatest possible benefit. This has, of course, always been the ob-

jective, but in the past the goal has been sought within the limits imposed by a definite ratio of supervision to labor. Now it is pertinent to raise the question if the time has not come to make changes that will produce an increase in this ratio.

In 1939 the monthly salary of a track supervisor was roughly equivalent to the monthly wages of 3 1/3 trackmen. Today the pay of the same supervisor is equivalent to that of only 2¼ trackmen. This means that supervision is relatively much more economical now than it was ten years ago. What is the meaning of this changed relationship in terms of the amount of supervision that should be provided?

One railroad that has made a careful study of this problem estimates that the increased amount of work performed by the existing force when the supervisory staff is augmented by additional roadmasters, and territories shortened correspondingly, would be equivalent to the output of 10 to 20 men for each roadmaster added. Based on this relationship, serious consideration is being given a proposal for increasing the number of roadmasters by about 50 per cent, at the same time shortening roadmasters' territories to permit each of them to cover his district in two days.

It is reasoned that the closer supervision permitted by this plan would result in elimination of most of the track-patrol work now done by the section foreman, while at the same time the roadmaster would be able to specify the exact nature and location of the work to be done by his section foreman each day. The opinion is that the effect of this increase in the supervisory staff would compensate for one-half the man-hours that will be lost due to the 40-hr. week—the other half to be made up by increased mechanization and other expedients.

For any pay schedule for supervisors and labor there is an optimum ratio between the number of supervisors and the number of workmen. Since recent and proposed changes in wage scales and working hours have profoundly affected existing relationships the problem of each road is to determine what the new optimum ratio is and to take whatever measures are necessary to put it into effect.

The people of Berlin—even though they have been kept going by the magnificent performance of the airlift—have known for nearly a year what it means to be without trains. . . . For ordinary day-by-day service, where there is a big transportation job to be done—and where cost must be counted—there is nothing which can take the place of the train. . . . This in no way lessens appreciation of what the airlift did for the world. It is simply a recognition of the fact that while America enjoys and uses every sort of transportation—and has work for them all to do—the basic and fundamental service—the one whose existence makes possible the operations of all the others—is that performed by the high-capacity, low-cost railroad freight train.

—*The Railroad Hour, May* 23, 1949

MONEY IS THE SAME IN ANYBODY'S POCKET

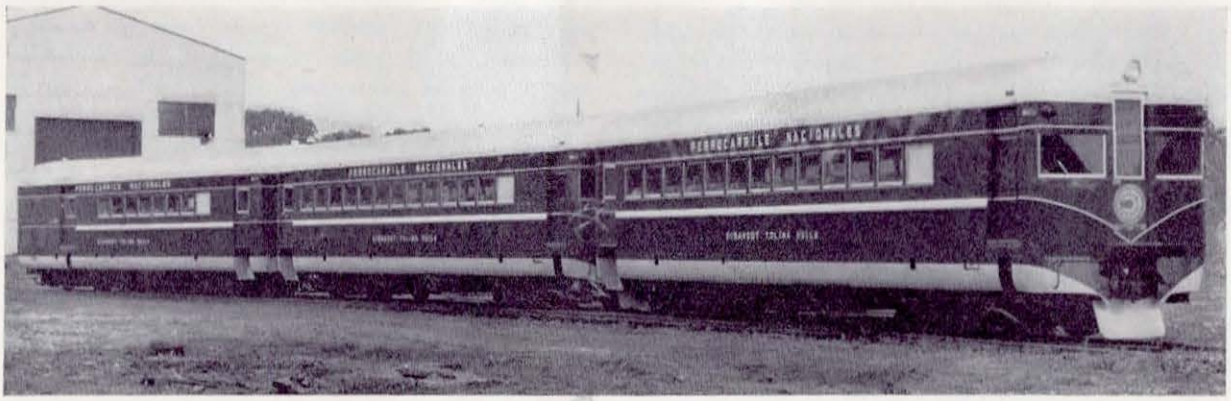
At a recent meeting of the Chicago Car Foremen's Association a statement was made by A. L. Green, Sr., of the Freight Claim Division of the Association of American Railroads which can be advanced as an excellent reason both for keeping existing cars in better repair and for continuing to purchase as many new freight cars as can be turned out. Mr. Green noted that increased claim payments by the railroads on grain and livestock, for example, were almost wholly accounted for by the large increases in the selling price of these commodities.

Such an increase in value doubles the incentive for keeping cars in good repair, not only because each individual claim increases proportionately with the advance in the price of the item, but also because many more claims are filed for losses which are small by units or by volume. Where formerly such losses might have only a small cash value, the tremendous increase in the price range, particularly of foodstuffs, now makes even small unit or volume losses worth the trouble to the shipper of filing claims for reimbursement.

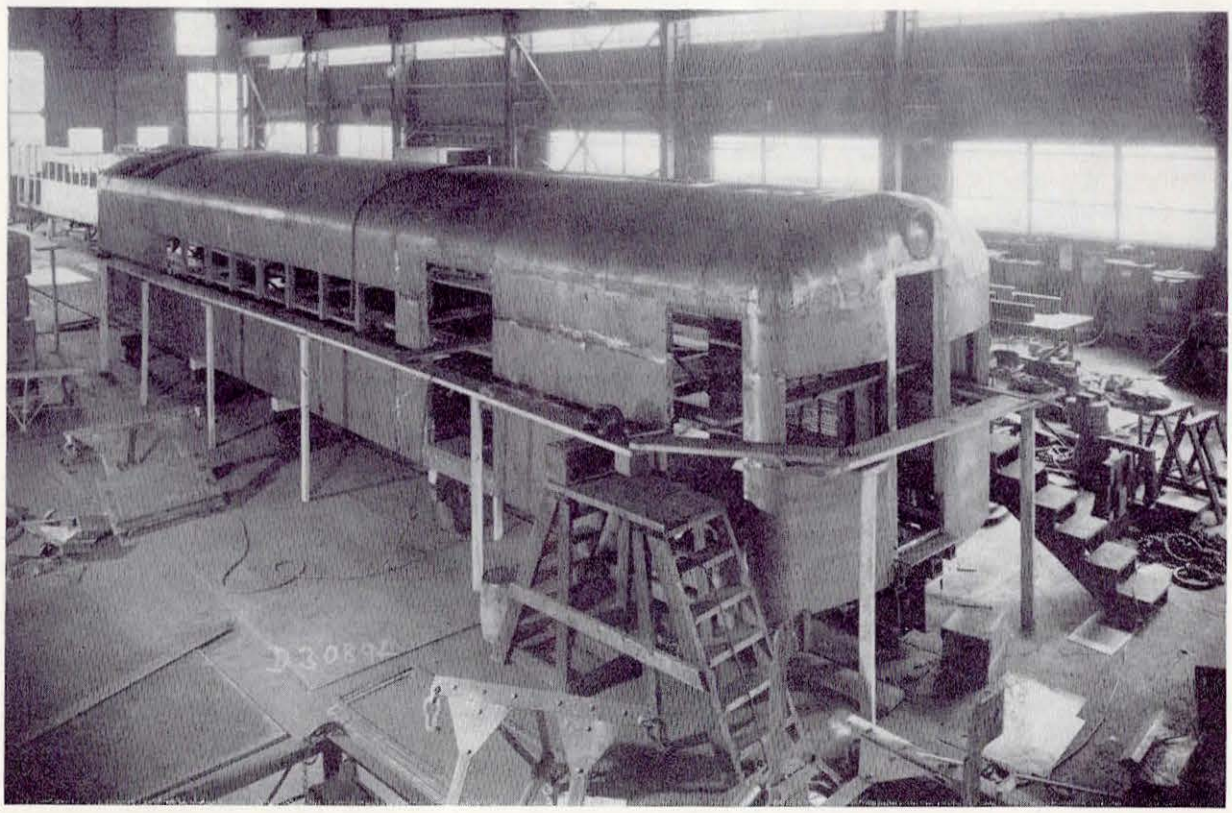
The thought has been advanced in the past that quite often expenditures are not made by one department of a railroad because none, or too little, of the return accrues to the department that makes the expenditure. For example, the mechanical department may have to make a decision as to whether or not $50,000 should be spent improving certain features of car maintenance. While such an expenditure may save that much alone in reducing losses to lading, no tangible improvement in mechanical department performance is shown to offset its expenditure. How many roads have a system to show the final result otherwise than as an increase of $50,000 in mechanical department expenses? How many roads have sufficient liaison between departments to credit savings made in one department to expenditures made by another department?

Questions of this kind usually have a way of working themselves out so that economically justifiable expenditures are eventually made. But active effort toward providing means of evaluating expenditures of one department in terms of savings by a second should expedite a process which is unquestionably in the interest of the railroads. Where expenditures for any method of improving the movement of freight whether by improved cars, better locomotives, higher standards of track maintenance, or more effective signaling—bring a return which equals or exceeds the cost of the improvement, there is good reason to assume that the overall benefit will justify the expenditures.

DAVENPORT-BESLER BUILDS



Cummins-G.E. multiple-unit power plants are installed in 36-in. gage equipment—Total of 1,100 hp. required for heavy grades—Seating accommodations for 124 passengers



One of the cars in process of construction in the shop

THREE-CAR DIESEL TRAIN FOR COLOMBIA

The Davenport-Besler Corporation, Davenport, Iowa, which now offers a standardized line of lightweight multiple-powered passenger equipment for railway service, has recently completed construction of its first three-car Diesel-driven train, scheduled for delivery to the National Railways of Colombia, South America. Equipped with four Cummins-G.E. Diesel-electric power plants aggregating 1,100 hp., the train is designed to maintain scheduled speeds on grades up to 4.6 per cent on the 36-in. narrow-gage line between Bogata and Ibaque. Baggage space and buffet service are available in the lead motor car. The train has a total seating capacity of 124 persons and total train weight of 183,000 lb.

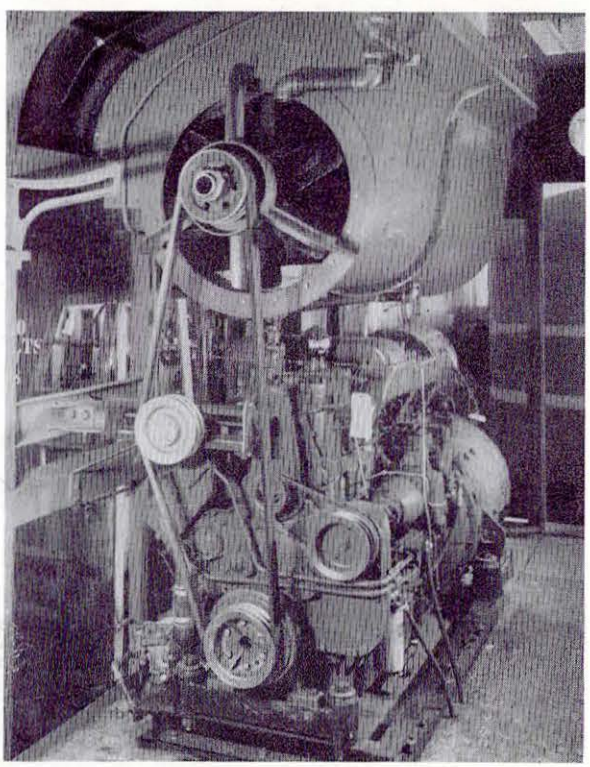
Individual cars of this train are 48 ft. 2 in. long over the end posts and have a cross section 9 ft. 2 in. wide by 12 ft. high, the maximum practicable with cars of this length in the tunnels which must be negotiated. All three cars are built to the same lightweight design using welded Cor-Ten steel and aluminum construction. The passenger-buffet-baggage motor car, with two 275-hp. power plants in opposite corners of the car and electric drive to both trucks, has a ready-to-run weight of 71,000 lb. The seating capacity of this car is 28.

Each of the two trailing passenger motor cars, with a power plant in one corner and electric drive to one truck only, weighs 56,000 lb., the seating capacity being 48. Each motor car of this train has a control station in one end just across the aisle from the 11-ft. power plant compartment. Individual cars can be operated as single units, or coupled together in any combination for operation as a unit train from either end without turning.

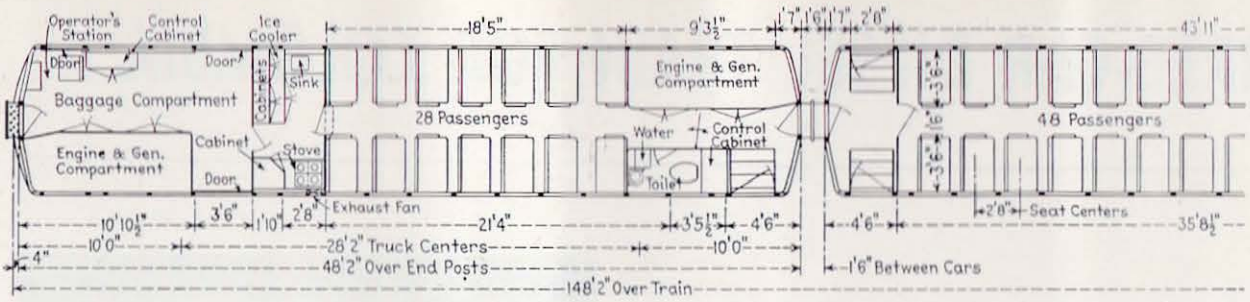
Power Equipment and Trucks

The Cummins Model NHBS engines used on this train are supercharged, 6-cylinder, 5⅛-in. bore, 6-in. stroke Diesels, developing 275 hp., at a maximum speed of 2,100 r.p.m. The sectional-core radiator is roof-mounted. The water capacity is 29 gal. in the engine and radiator. Two 24-in. fans, operated at engine speed, supply air for cooling the radiators.

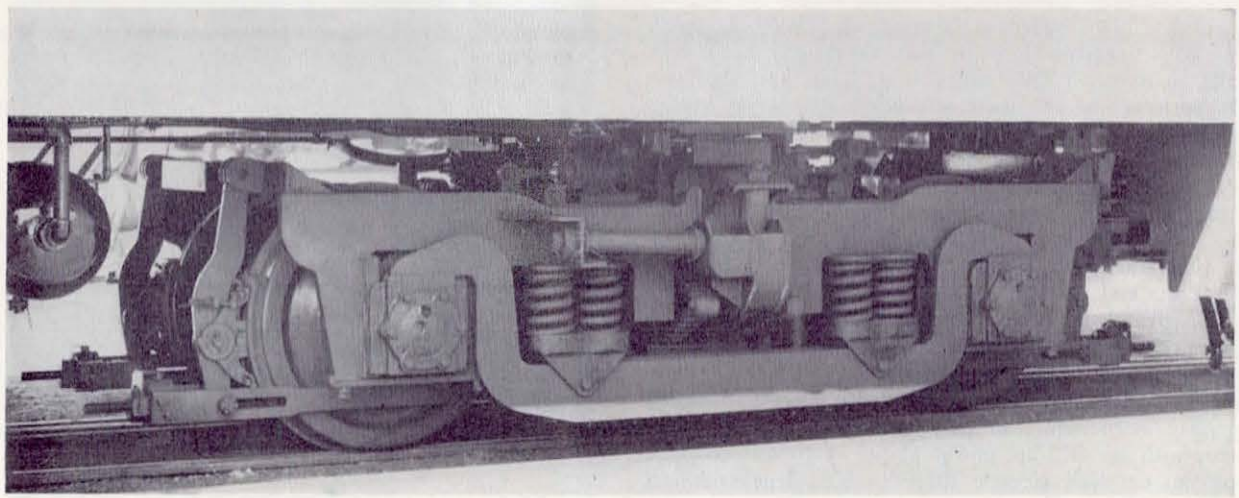
Electrical equipment in each of the two power plants in the passenger-buffet-baggage motor car consists of a General Electric GT-569, four-pole, self-excited railway generator, direct connected through a flexible disk-type coupling to the Diesel engine. The generator has a series winding for engine cranking. This engine-generator unit is mounted on a common sub-base for easy removal. One GY34B auxiliary generator, operating in conjunction with a suitable regulator, supplies fixed voltage over the full speed range of the engine for battery charging and other auxiliary



The lighting and seating arrangement of one of the 48-passenger units (above) is modern and attractive. Below—Diesel-electric power plant and roof-mounted radiator



Above—Floor plan of Davenport-Besler three-car Diesel train. Below—Fabricated swing-bolster truck with combined coil-elliptic spring suspension



General Dimensions of Each Car in the Three-Car Train

Track gage, in.	36
Wheelbase, truck, ft.-in.	7- 6
Wheelbase, total, ft.-in.	35- 3
Truck centers, ft.-in.	28- 2
Length over end sills, ft.-in.	48- 2
Width over side sills, ft.-in.	9- 2
Height, rail to top of roof, ft.-in.	12- 0
Height, rail to top of floor, in.	46½
Height, rail to center of couplers, in.	24
Seat spacing, in.	32
Aisle width, in.	19

loads. Two G.E.-747 four-pole d.c. commutating-pole railway motors, designed for use with an engine-driven generator and operated with full or shunted field, are axle hung on each truck of this car. Each passenger motor car has one power plant, with two motors mounted on the leading truck.

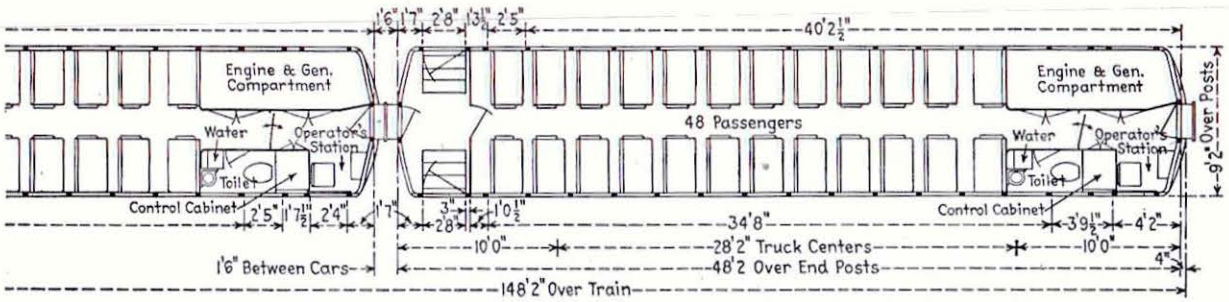
The trucks are fabricated swing-bolster type with hydraulic shock absorbers. The wheels are 33 in. rolled steel multi-wear. Axles are of forged steel with cast-steel journal boxes and Timken tapered roller bearings. Clasp brakes with truck-mounted brake cylinders are a feature of the design.

Body Construction

The underframe and superstructure frame are of rolled- and formed-steel sections. Roof and side sheets are of stretcher-leveled steel. The body is of all-welded construction. The flooring is seven-ply metal-bonded plywood, covered with battleship linoleum. Interior surfaces of the side and roof sheets are coated with Dednox to reduce sound conductivity. This also gives added insulation along with the Fiberglas mats placed between posts which are covered with ⅛-in. Masonite. All partitions and bulkheads are of metal-bonded plywood. All windows are aluminum single raising sash, glazed with 3/16-in. laminated safety glass. Window sills are capped with Formica. Window curtains are of Pantasote mounted on concealed rollers. Parcel racks are of aluminum and extend 14 in. from the wall at a level 5 ft. 9 in. above the floor. Individual lights are built into the luggage racks over each seat. The car is heated by engine-water circulating through a heating core and air blown through a center ceiling duct.

The passenger-buffet-baggage car has a baggage compartment surrounding the engine-generator set in the forward end, then a compact buffet section, a 28-seat passenger compartment, toilet facilities, and an entrance doorway across the aisle from the engine-generator compartment in the rear end. Each of the two passenger motor cars has a vestibule entrance at one end only, then a 48-seat passenger compartment and toilet facilities and control station opposite the power compartment in the other end of the car.

All three cars are equipped with Westinghouse Schedule SME straight-air brake equipment with automatic emergency, safety control and sanding features, and also with General Electric seven-stage dynamic



brake equipment operating in a range of 16 to 50 m.p.h.

An Exide 64-volt, 248-ampere hour, 32-cell battery is located under each car in a movable rack for accessibility in servicing. This furnishes power for light, fans and other auxiliaries.

For each power plant there is a 300-gal. fuel tank mounted under the frame, from which an electric-driven pump supplies fuel to the engines. A 150-gal. water tank mounted under the car supplies water for passenger use.

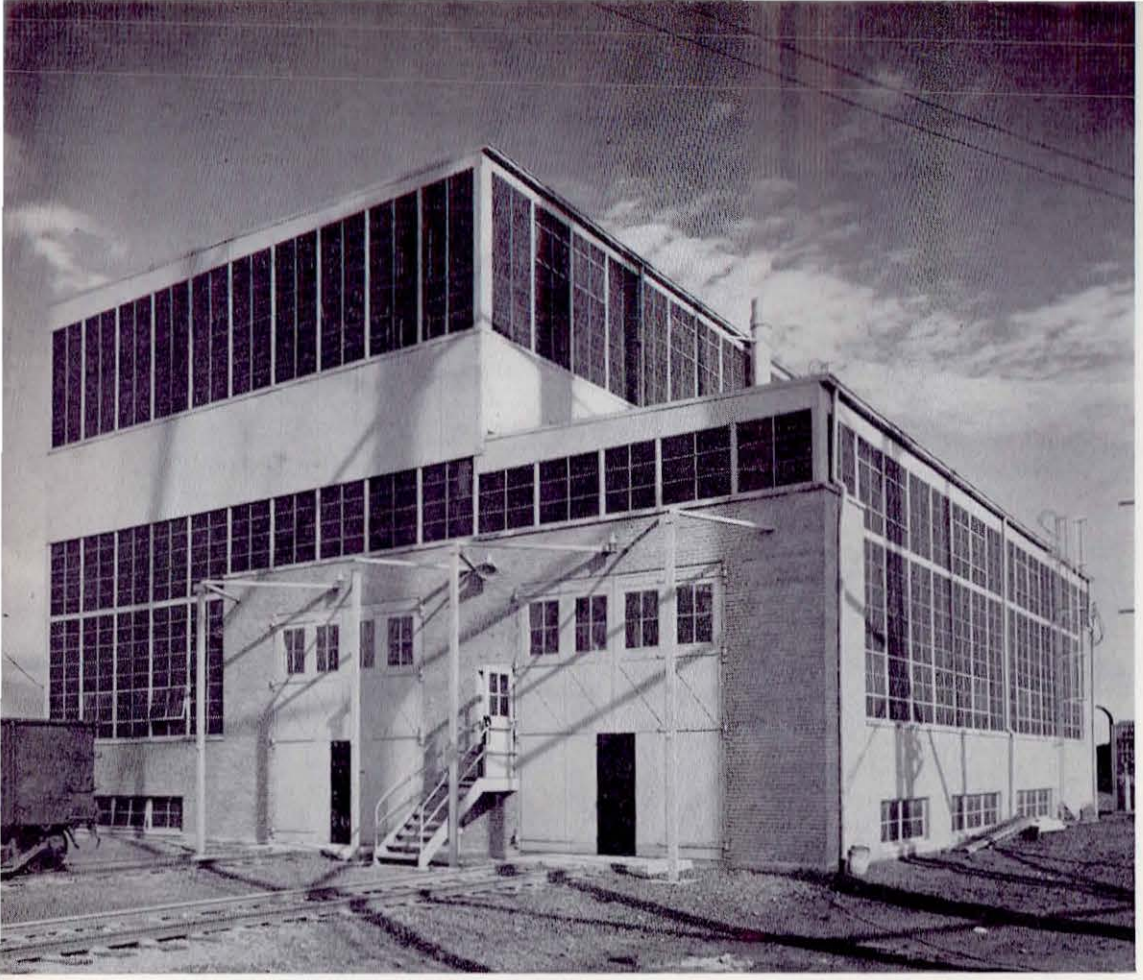
Maintenance Simplified

To facilitate maintenance, these motor cars are made with all parts interchangeable, including the trucks, Diesel engines, generators, air compressors and controls. The complete Diesel power plant may be removed through the car end and a spare engine and generator substituted, so as to avoid tying up the car itself more than a few hours. All trucks are interchangeable and easily installed. With a minimum of alterations, any trailer car may later be made into a dual power-plant car as all car structures are substantially identical. The Diesel engines and heavy-duty electrical equipment are conservatively rated to reduce maintenance and assure long service life.

The complete interchangeability of all car and power plant parts will facilitate servicing these cars; help greatly in the problem of material supply; and make the job of training both operating and maintenance forces relatively easy. Due to standardization and the use of a single carefully engineered design, in spite of the great increases in both labor and material since the war, the unit price, the price per ton, per horsepower and per seat of the new motorcars is said to be comparable with prewar costs of similar equipment.

PARTIAL LIST OF MATERIALS AND EQUIPMENT ON THE DAVENPORT-BESLER-BUILT TRAIN FOR THE NATIONAL RAILWAYS OF COLOMBIA

Underframe	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Wheels	Standard Steel Works Division of the Baldwin Locomotive Works, Burnham, Pa.
Journal bearings	Timken Roller Bearing Co., Canton, Ohio
Buffers; hand brake	W. H. Miner, Inc., Chicago
Couplers	National Malleable & Steel Castings Co., Cleveland, Ohio
Air-brake equipment	Westingtouse Air Brake Co., Wilmerding, Pa.
Brake shoes and heads	American Brake Shoe Co., New York
Shock absorbers	Monroe Auto Equipment Co., Monroe, Mich.
Truck pads	Fabrecka Products Co., Boston, Mass.
Coil and elliptical springs	Union Spring & Manufacturing Co., New Kensington, Pa.
Aluminum sheet and aluminum window trim	Aluminum Company of America, Pittsburgh, Pa.
Roof and side sheets	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Body insulation	Gustin-Bacon Manufacturing Co., Kansas City, Mo.
Door locks and keyhole escutcheons (engine compartment)	A. L. Hansen Manufacturing Co., Chicago
Rotary door locks and rim spring latch (control cabinet)	A. L. Hansen Manufacturing Co., Chicago Yale & Towne Manufacturing Co., Stamford, Conn.
Masonite	Masonite Corp., Chicago
Metal-covered plywood	Haskelite Manufacturing Corp., Grand Rapids, Mich.
Oillite bushings	Chrysler Corp., Amplex Division, Detroit, Mich.
Car windows	Adams & Westlake Co., Elkhart, Ind.
Window regulators	Young Windows of America, Brooklyn, N. Y.
Window sills	Formica Insulation Co., Cincinnati, Ohio
Window curtains	Railway Curtain Co., Chicago
Curtain material	Fantasote Corp., New York
Doorlocks; door hinges; cabinet locks sliding-door locks	Adams & Westlake Co., Elkhart, Ind.
Trap door lock	O. M. Edwards Co., Syracuse, N. Y.
Seats	Heywood-Wakefield Co., Gardner, Mass.
Luggage racks	Aluminum Company of America, Pittsburgh, Pa.
Linoleum	Armstrong Cork Co., Lancaster, Pa.
Rubber tape	E. I. du Pont de Nemours & Co., Fabrics & Finishes Dept., Wilmington, Del.
Dednox	Dednox, Inc., Chicago
Windshield wipers	Hays Corporation, Michigan City, Ind.
Perforated metal	Harrington & King Perforating Co., Chicago
Kitchen cabinets	Midwest Manufacturing Co., Galesburg, Ill.
Stove; sinks	E. J. Willis Co., New York
Engine	Cummins Engine Co., Columbus, Ind.
Rubber mounting (engine)	Lord Manufacturing Co., Erie, Pa.
V-belts	Dayton Rubber Co., Dayton, Ohio
Exhaust silencer	Maxim Silencer Co., Hartford, Conn.
Asbestos packing (mufflers)	Garlock Packing Co., Palmyra, N. Y.
Fuel pump	Viking Pump Co., Cedar Falls, Iowa
Fuel regulator	Watts Regulator Co., Lawrence, Mass.
Fuel tank filler caps and vents	Protecteseal Co., Chicago
High-pressure hose	Aeroquip Corp., Jackson, Mich.
Fan-blade assemblies	Schwitzer-Cummins Co., Indianapolis, Ind.
Fan-shaft bearings	Fafnir Bearing Co., New Britain, Conn.
Oil seals	Chicago Rawhide Manufacturing Co., Chicago
Radiators	Modine Manufacturing Co., Racine, Wis.
Compressors	Gardner-Denver Co., Quincy, Ill.
Compressor joints	Barco Manufacturing Co., Chicago.
Blower fan	American Blower Corp., Detroit, Mich.
Electric motors	General Electric Co., Schenectady, N. Y.
Booster coil for heater	Modine Manufacturing Co., Racine, Wis.
Sander traps and valves	Prime Manufacturing Co., Milwaukee, Wis.
Traction motor generators; auxiliary generators and controls; dynamic braking	General Electric Co., Schenectady, N. Y.
Indicator lamps (control panel)	Dial Light Co. of America, New York
Batteries	Electric Storage Battery Co., Philadelphia, Pa.
Needle bearings (rollers for battery trays)	Torrington Co., Torrington, Conn.
Interior light fixtures; exhaust fans	Safety Car Heating & Lighting Co., New York
Headlights; marker lights	Pyle-National Co., Chicago
Marker light glass	Corning Glass Works, Corning, N. Y.
Pneumatic horns	Westinghouse Air Brake Co., Wilmerding, Pa.
Bell ringer	Viloco Railway Equipment Co., Chicago
Water tank	Crane Co., Chicago
Water-cooler parts; toilets	Dayton Manufacturing Co., Dayton, Ohio



The exterior of the shop is characterized by large areas of steel sash glazed with frosted, hammered blue glass

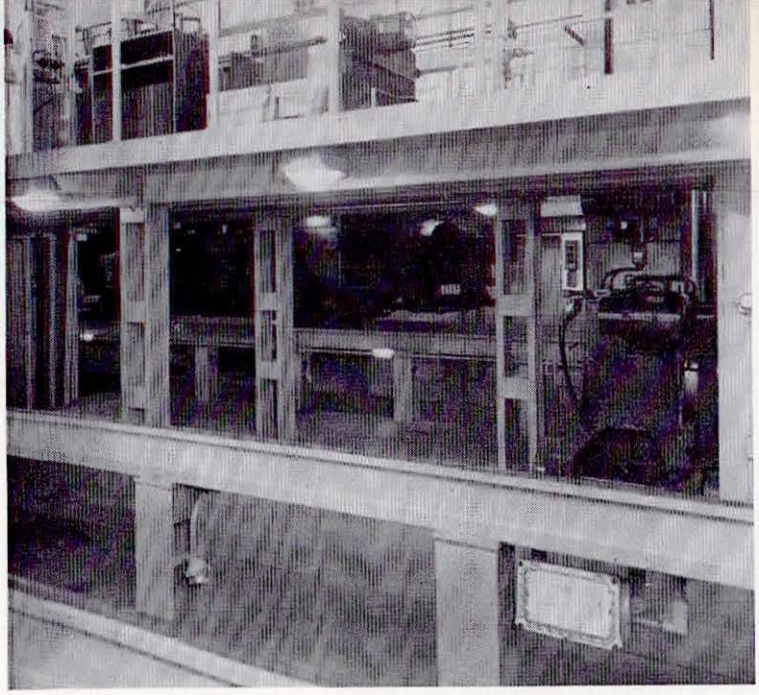
Small Diesel Shop Sets Pace in Design

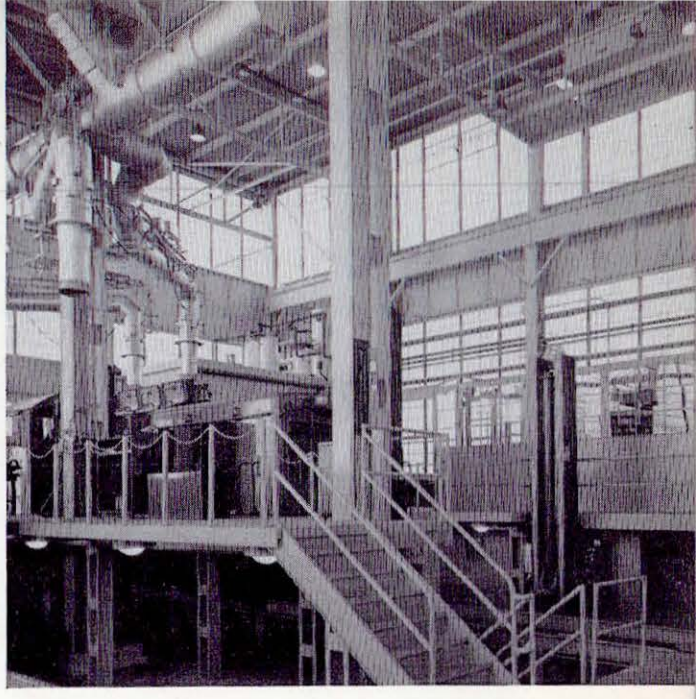
Facility built by Detroit, Toledo & Ironton, while costing only $450,000, incorporates practically all features common to larger structures, and some new ones not previously used

That Diesel locomotive repair shops need not be large to be impressive and fully effective is proved by a facility recently placed in service at Flatrock, Mich., by the Detroit, Toledo & Ironton. While this shop is only about 75 ft. wide and 102 ft. long overall, and cost only $450,000 to build, it presents, in a compact, efficient arrangement, practically all the design features found in much larger shops. Not content with this achievement, those who planned and built the shop incorporated in it a number of new features designed to give increased safety and efficiency of operation. Among these is a system of adjustable overhead ducts for conveying exhaust gases directly from Diesels to the outside atmosphere, with minimum heat loss from the building, and a specially designed unit heater for supplying heated make-up air to replace such loss as does occur through the exhaust system and the doors. The heating system in general and the method of illumination are other features that deserve special mention.

The shop is designed for the inspection, servicing and heavy repair of Diesel switchers, of which the road has nine at present. However, with the thought that it may be used for road Diesels some day, provision has been made for extending the building an additional 140 ft. in length with the minimum difficulty or interference with operations.

The shop has two through tracks, each served by a pit and the conventional arrangement of cab-floor-level platforms and depressed working levels. One of the tracks is located in a low bay 24 ft. wide and 82 ft. long, while the other, on 23-ft. centers with the first, is located in a high bay 52 ft. wide and 102 ft. long. To enable workmen to move between the ele-





Above left—The open-side pit construction and the directional lights used under the platforms are among the new structure's features

Above right—the exhaust system for disposing of stack gases in the high bay is shown at the upper left and the special heater for furnishing heated make-up air at the upper right

Below—The adjustable exhaust ducts for stack gases are manipulated from the platform level

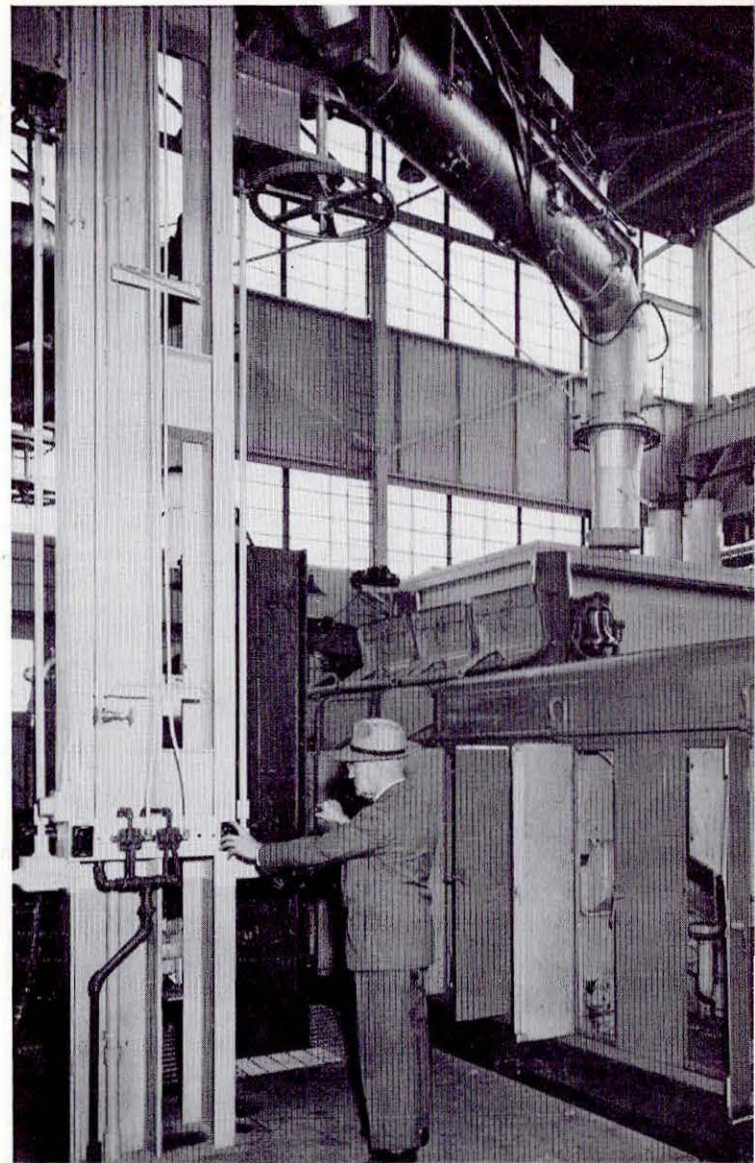
vated platforms, electrically-operated Bascule-type lift bridges were installed to span the tracks at one end of the building.

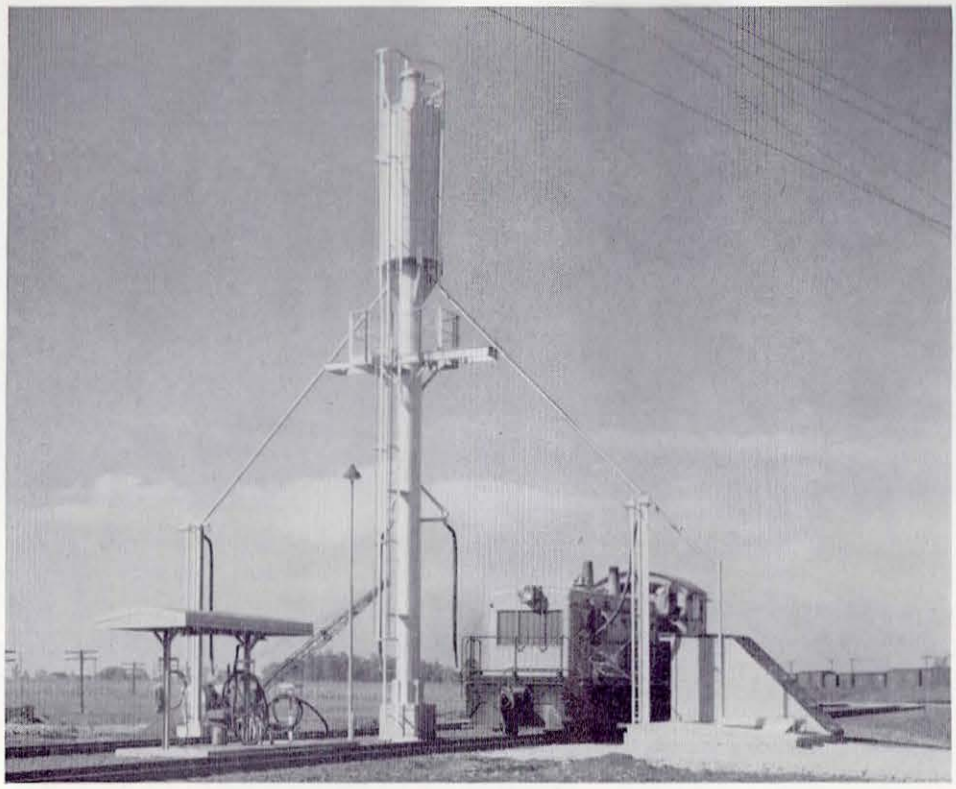
Both the low and high bays are designed and used for servicing and light repairs, and to that end each has a 68-ft. pit and is served, above or below the platforms, with lubricating-oil changing facilities, compressed air and hot water radiator fill lines. All heavy repairs are handled in the high bay section, with its overhead clearance of 40 ft. above the top of rail. For such repairs, this bay is fitted with a shorter pit, 21 ft. long, for additional inspection and repairs on trucks, is served by a 25-ton Northern crane operating the full length of the building, and is also equippel with four 50-ton Whiting jacks.

The jacks, which are used for the removal of traction trucks, are located immediately adjacent to the pit. One pair of these jacks is mounted on flanged wheels which operate on rails at right angles to the pit. The other pair of jacks is mounted on plain wheels rolling on the concrete floor. Both pairs can be pushed towards or away from the pit by one man by hand. When the pair operating on the concrete floor has to be moved lengthwise along the pit, to accommodate different lengths of locomotives, this is done by the traveling crane. The jacks may be operated either individually or simultaneously by push-button controls placed below the platform level. When a truck is removed it is first pushed to a position over the short pit for further inspection or repairs, after which the traveling crane is used to shift it to the adjacent floor area.

Complete Overhauling Facilities

There are various auxiliary features in the high bay. Along the outer side of the bay, with its floor depressed 5 ft. 4 in. below the track level, is a room 24 ft. wide and 60 ft. long for lubricating oil storage. In this room are a 12,000-gal. tank for fresh oil, a 1,000-gal. tank for used oil drained from locomotives, and two 30-gal. per min. Worthington gear-type pumps. Adjacent to one end of this room, and at an elevation 2 ft. 4 in. higher, is a small wash and toilet room for employees. Additional wash, locker and toilet facili-





The exterior servicing platform, protected by a canopy, has connections for supplying the Diesel switchers with fuel oil, cooling water, and dry sand, and for unloading fuel oil from tank cars

ties are available in the adjacent steam enginehouse. Directly over the lubricating-oil, storage room and the wash room, at the level of the elevated working areas, are a parts-cleaning room, a machine shop, and a storeroom. These facilities flank the 68-ft. track pit and extend its full length. The remaining area of the high bay, 35 ft. in length, at track level, is used for heavy repair work, and contains the short truck pit.

Construction Details

The building has a concrete foundation and the superstructure is of steel skeleton construction, with exterior walls of brick up to a level slightly above the elevated platforms. The remainder of the walls are of steel sash, glazed with frosted, hammered blue glass on three sides, except that a band of Cemetso board, 8 ft. high, extends around the high bay at a level about 13 ft. below the roof line. Construction on the interior consists of concrete floors and pits, and concrete platforms supported by steel columns and beams. The pits are of the open-side type, with the rails (152-lb.) welded directly to 8-in. steel columns spaced 4 ft. 5 in. apart.

The parts-cleaning room, in a corner of the high bay, has brick partitions faced on the inside with glazed tile, and the openings to this room are fitted with fire doors. The ceiling of the cleaning room is a reinforced concrete slab which supports a Cochrane Model B Zeolite water softener and two 80-gal. electric hot-water heaters. The machine shop and the storeroom have metal and glass partitions, and are open overhead except that the storeroom is covered with steel mesh. The color scheme for the interior consists of cascade blue down to the undersides of the roof trusses, seafoam green for the side walls, and focal yellow for movable and close-clearance objects.

Multiple-Unit Heating System

The heating system, which utilizes high-pressure steam supplied by a boiler in the existing steam enginehouse, reflects careful attention to the comfort of employees during cold weather. Several different sources of heat are provided in the shop, among them a line of Murray No. DR 30 grid fin-type cast-iron radiators along the walls below the windows. In addition, three Murray No. 520 unit heaters and one No. 525 unit heater of the same make are located at advantageous points 19 ft. above the floor line. Two specially designed thermostatically controlled unit heaters are provided to throw heated air into one end of the 68-ft. pits, each heater having a capacity of 170,000 B.t.u. per hour at a steam temperature of 100 deg. F. A portable unit heater is available for auxiliary heat.

About midway of the high bay at a height of 40 ft. above the floor line is a specially designed unit heater for supplying heated make-up air. This heater has a capacity of 1,200,000 B.t.u. per hour. When any of the enginehouse doors are opened, or when the Diesel exhaust system is in use, this unit heater automatically draws fresh air from the outside, forcing the heated air towards each end of the building. At all other times this unit automatically heats and recirculates inside air in the same manner as a conventional unit heater.

The system installed to dispose of exhaust gases is

one of the most interesting features of the shop. This system incorporates two movable metal ducts for each track, these being supported by the building columns separating the low and high bays. Each duct consists of a horizontal arm, with a vertical section at its outer end which fits over the stack of the Diesel locomotive. By means of a circular rack and pinion, operated by a crank from the platform level, each movable duct can be rotated in a horizontal plane to a position parallel with the line of columns, in the clear of the traveling crane. A telescoping feature permits adjustment of the lengths of the horizontal arms within a range of 4 ft. 6 in., this movement being controlled by a four-way Ross double solenoid valve. Also, a telescoping feature of the vertical sections, pneumatically operated, gives them a vertical travel of 11 in. to facilitate making contact with locomotive stacks.

The movable portions of the four exhaust ducts are all manifolded into a horizontal Transite duct, 20 in. in diameter, which leads to an exhaust fan placed on the roof of the low bay. The fumes are discharged to the atmosphere through a vertical Transite stack extending above the roof line of the high bay. To avoid heat loss through the exhaust system each movable duct is fitted with a damper that is kept closed except when the duct is in operation.

Variety of Lighting Fixtures

For illumination in the high bay there are three longitudinal rows of lights overhead, each row containing three 750-watt incandescent lights and three 400-watt, high-intensity mercury-vapor lamps. To obtain optimum light distribution the two types of lights in each row are staggered. In the low bay there are two rows of overhead lights, each row consisting of three 400-watt wide-spread mercury-vapor lamps and two 750-watt incandescent lamps. All the incandescent and mercury-vapor lamps are Westinghouse Millite units. The pits are illuminated by 200-watt Benjamin pit fixtures secured to the track rails. On the underside of each platform, along the edge adjacent to the pit, there are eight 200-watt Holophane directional lights. For general illumination under the platform Benjamin Sealflo fluorescent lighting fixtures are used.

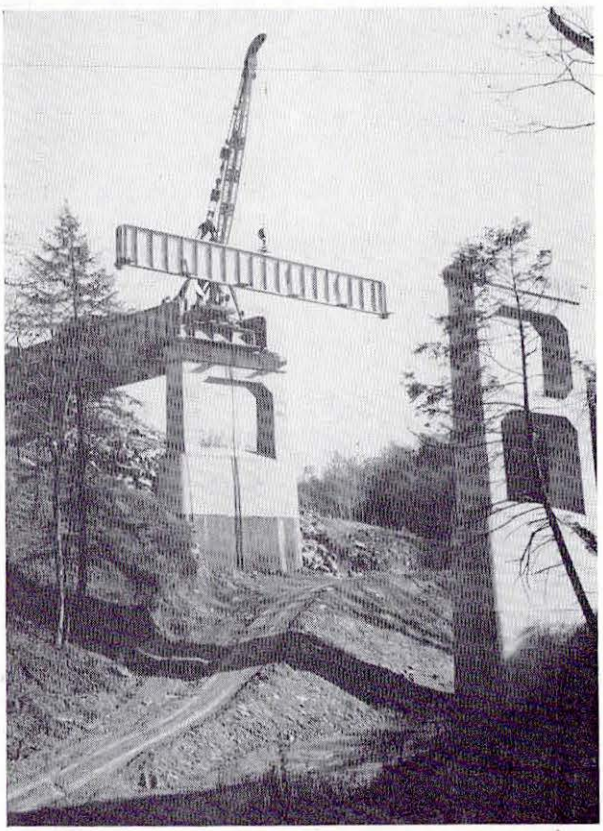
Fueling and Sanding Facilities

For fueling the Diesels at the new shop there is an outside concrete fueling platform, 7 ft. by 20 ft. in plan, which serves two tracks. Protected by an overhead canopy, this platform, in addition to columns and hose connections for fueling and watering locomotives, has connections for unloading fuel from the undersides of tank cars. Fuel oil is stored in three 27,000-gal. tanks above ground. In an adjacent pumphouse are two 100-gal. per min. Worthington rotary gear-type pumps. Other equipment in the pumphouse includes Bowser air relief valves, a Briggs filter and King gages.

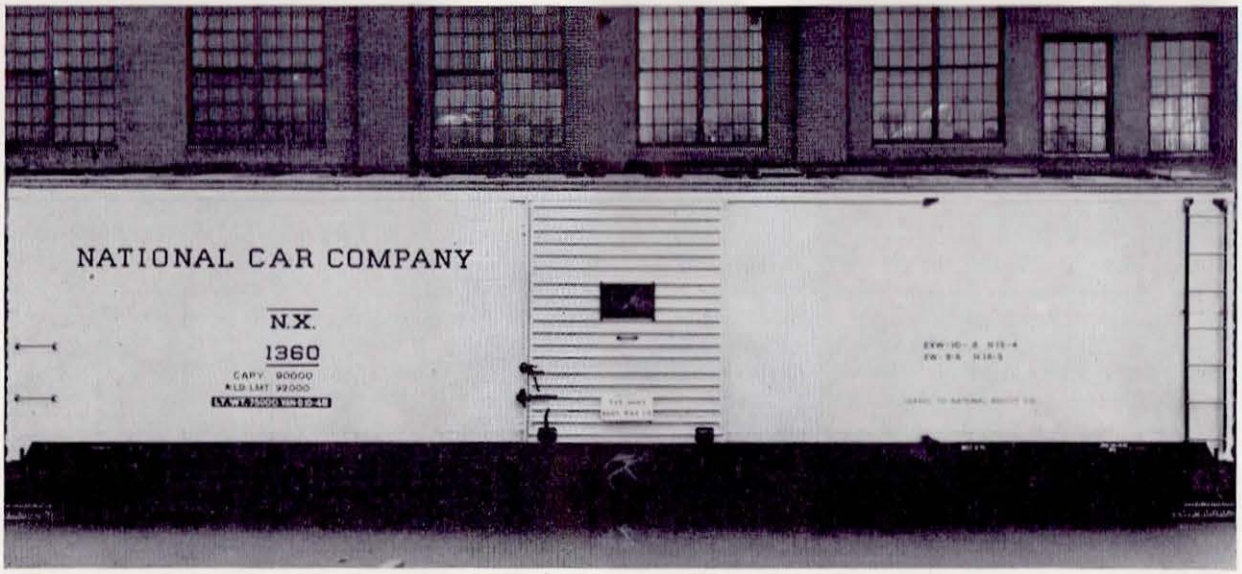
Adjacent to the fueling platform is a Ross & White sanding plant consisting of a 10-ton overhead storage tank with connections for delivering sand to engines on two tracks. The sand plant also includes an underground hopper of 15 tons capacity, into which dry silica sand is dumped from trucks. From the hopper the sand passes through a screen and into a large metal drum. Movement of the sand from the drum to the overhead storage tank is by compressed air and is governed automatically by "electric eye" controls.

The new Diesel shop is protected, both inside and outside, by a fog-nozzle fire-protection system. Additional protection consists of 2½-gal. foam units under the platforms, 20-lb. carbon dioxide units in the lubricating-oil room and at the track and platform levels, and a 30-lb. Ansul unit at the outside fueling platform. Explosion-proof motors and electrical connections are used in the pumphouse, the oil storage room and under the platforms.

The plans for the new shop were developed and the construction work was performed by the Austin Company, Detroit, Mich., under the direction of the engineering and mechanical departments of the road—F. W. Kasten, chief engineer, J. S. Hancock, bridge engineer; and R. W. Wilber, superintendent of motive power. Terry Loudermilk was in direct charge of construction for the Austin Company.

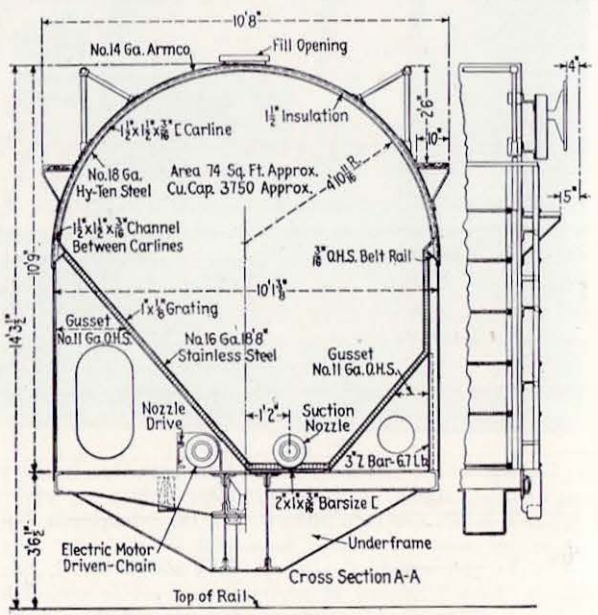


Construction of this bridge near Saltsburgh, Pa., is one of eight major projects, including four other bridges, undertaken by U. S. Steel's American Bridge Co. in the Pennsylvania Railroad's relocation of trackage lanes that will go under water when the government's Conemaugh flood control dam is completed. Some 7,000 tons of structural steel will be erected by American Bridge on five double-track spans and three underpasses in this project. Impounded waters at maximum pool are expected to crest several feet below the top of the concrete piers pictured here



NEW CAR CARRIES BULK-LOADED FLOUR

A new type car designed for hauling bulk-loaded flour and other fine-grain commodities is in test service between Toledo, Ohio, and Atlanta, Ga. Officers of the National Fitch Corporation, designers of the car, express the belief that it will eliminate most of the $1,000,000 annual loss-and-damage bill of the railroads chargeable to flour. Also, where the present load of flour is approximately 70,000 lb. per standard box car, it is expected that the car as it will finally be produced (not the present test model) will have a capacity of 140,000 lb., making the revenue load about twice that now prevailing.



Cross section of the car. The nozzle drive which appears to be outside the carrying compartment unloads the compartment at the other end of the car

The present test car, a converted auto box, has made several runs, carrying some 90,000 lb. of flour each trip with no loss or damage to the lading, the designers report. Condensation has been absent in the flour and the unloading easy, despite load settling of about 10 in.

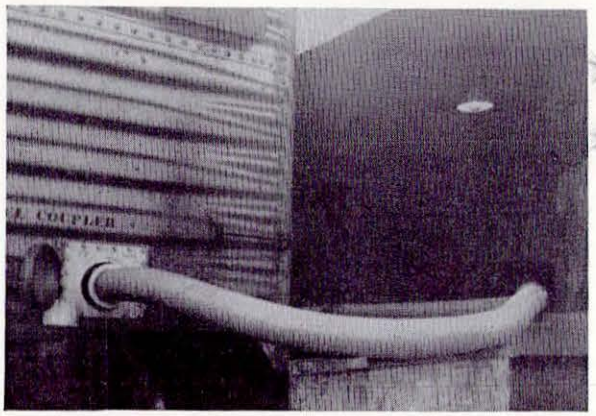
The car is divided into two sections by a partition which runs crosswise. Each section is built along the lines of a hopper, and is loaded through two hatches in the roof of the car. All slope sheets and other interior metals are stainless steel, with welded joints which are ground after assembly. Unloading is done by two electrically powered traveling suction nozzles which are built into the car, one in each compartment. These nozzles travel up and down the length of the sections at a rate of 12 ft. per min. on a sprocket-driven chain. The nozzle is so designed that if it becomes overloaded a cut-off switch automatically stops movement until it is cleared. When unloading is to be done, a suction line from the receiving facility is attached, the nozzles are activated and the load is discharged through the attached line. This car can be unloaded in about four hours, the builder reports.

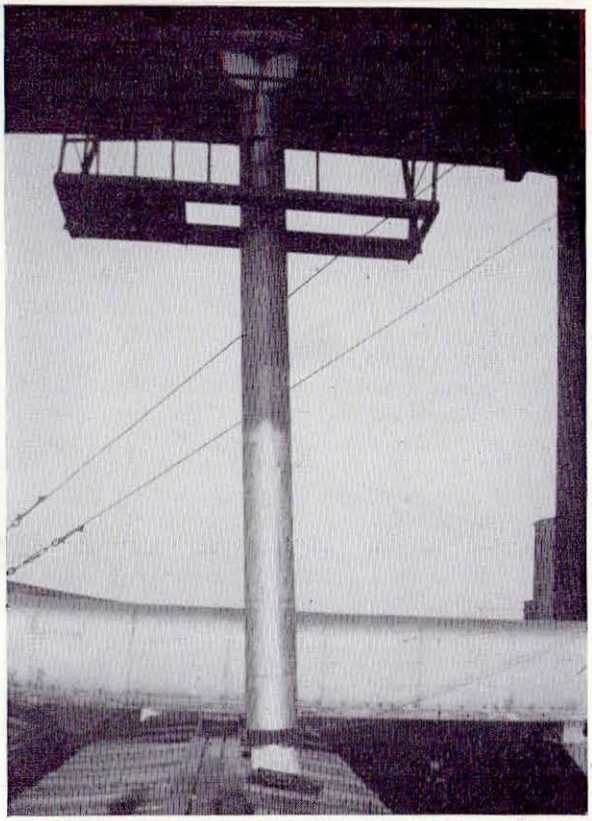
The car is always returned to the loading point empty and on the return movement vents are opened which permit exchange of air, through filters, between the inside and outside of the compartments, equalizing outside and inside temperatures and thus preventing condensation on the inside sheets. The filtering mechanism is built into the car.

Facing page—The car which is running in tests is a converted auto box

Right—Loading the car through hatches in the roof

Below—Unloading at destination. Since flour is mechanically loaded and unloaded, hands never touch it during transportation. Flour mills and bakeries are being designed so that neither the flour nor the bread is ever touched in process





NEED FOR "SELLING" SAFETY TOLD AT THREE-DAY A. A. R. MEETING

Railroad safety, if it is to be genuinely effective, must be "sold" to employees through more "encouragement" and "admonition," with less emphasis on "investigations" and "record marks." In addition, it is of paramount importance that safety officers and supervisors recognize the fact that the employee is "human" and, as such, should be treated "as we would like to be treated."

These conclusions, along with many others relating to safety on the railroads, were reached at the twenty-ninth annual meeting of the Safety Section of the Association of American Railroads, held at St. Paul, Minn., May 23 to 25, inclusive. Attended by nearly 300 railroad safety officers, the session included eight safety addresses, committee reports, panel and "on the floor" discussions, and motion pictures. Presiding as chairman was J. R. Tenney, superintendent of safety of the Western Maryland.

One of the principal subjects taken up at the meeting—that of "selling" safety—was discussed pointedly by G. A. Goerner, general storekeeper of the Chicago, Burlington & Quincy, who said: "I know of no more effective way of selling safety to railroad employees than through supervisors. Unless the supervisor is sold on safety—unless he is so permeated with safety ideas that he is enthused with that subject—his subordinates will never catch the safety spirit. Loyalty works from the top downward—never from the bottom upward. If a supervisor expects to get loyalty from his subordinates, he must first be loyal to them. Department heads and safety directors must display genuine interest in safety so as to instill into division and local officers an abiding safety complex."

Other Speakers

L. C. Sprague, president of the Minneapolis & St. Louis, spoke briefly at the section's luncheon meeting on May 24, pointing out the need for legislation which would prohibit the issuance of driving licenses to "teenagers" until they reach an age "when they understand what speed is." He decried the number of such drivers who drive in front of and into the sides of trains. Other speakers on the three-day program, and their subjects, were: W. J. Whalen, assistant general manager, Chicago, Milwaukee, St. Paul & Pacific,

"What Safety Means on the American Railroads"; Bernard Blum, chief engineer, Northern Pacific, "Grade Crossing Accidents"; F. E. Harrison, general superintendent, Chicago, St. Paul, Minneapolis & Omaha, "Train Accidents"; D. T. Bagnell, general superintendent, Chicago, Milwaukee, St. Paul & Pacific, "Train Service Accidents"; P. L. Jones, trainmaster, Burlington, "Views on Prevention of Train-Service Accidents"; H. W. Proctor, superintendent of motive power and machinery, C. St. P. M. & O., "Safety in Roundhouses and Shops"; and R. R. Manion, engineer, maintenance of way, Great Northern, "Safety of Operation Maintenance of Way Department."

Emphasized at one of the panel sessions was the fact that trainmen and enginemen have the highest casualty rate among railroad employees, and that the nature of their tasks makes it extremely difficult to get them together for safety discussions during working hours. A step toward the solution of this problem was pointed out by M. A. Nugent, superintendent of safety of the Southern Pacific, who reported that his road had successfully interested S. P. union leaders in safety to the extent that safety meetings during off-hours are being sponsored by local brotherhood chairmen. One such meeting, presided over by a local chairman of the Brotherhood of Railroad Trainmen, attracted 400 employees, he said. Competition is developing between the crafts as to which organization can have the largest turnout, said Mr. Nugent, adding that the safety films presented at the meetings have a "strong emotional appeal." Two other railroad officers reported on the willingness of labor representatives to cooperate in the promotion of safety.

Mr. Bagnell stated, in his address, that a study of the causes of train-service accidents shows that the large majority of such accidents could have been prevented by employees themselves, and a very small percentage were due to unsafe conditions existing on the property or equipment. He said it is essential to railroad safety that the employee have the proper mentality, education, physical condition and habits for the job, that he be supervised properly and receive commendation for good work.

Committee Reports

Prevention of Highway Crossing Accidents.—A favorable trend in the number of grade crossing accidents and casualties is noted for the three-year postwar period, a reduction of 6.10 per cent having been effected in 1948 as compared with 1946. The report stated: "While this reduction . . . may appear to be small when considering the overall picture . . . a more favorable situation than the figures indicate actually exists due to the fact that the accomplishments were made in face of continuing increases in motor vehicle registration as well as in the amount of gasoline consumed per motor vehicle."

Train-Service Accidents.—Decreases in 1948, as compared with 1947, were effected in the number of "all persons," "trainmen" and "other employees" categories of train-service accidents. The total of "all persons" killed in 1948 (7.2 per cent less than in 1947) was the lowest in any year since 1922, and the number of injured was the lowest since 1941; the number of trainmen killed in 1948 was the lowest since 1939, and trainmen injured was the lowest since 1942; the number of "other employees" killed in 1948 was less than in any year since 1940; and the number injured was less than in any year since 1941.

Non-train Accidents.—In 1948 there were 134 nontrain fatalities, as compared with 162 in 1947, an improvement of 17 per cent. Total nontrain casualties in 1948 were 15,045, compared with 17,359 in 1947, a decrease of 13 per cent. . . . "This improvement in nontrain casualties is encouraging, although it did not quite keep pace with the decrease in total casualties. It is in line with corresponding decreases in train and train-service casualties."

Train Accidents.—"Progress made in 1948 is very encouraging. . . . There were a total of 11,893 train accidents, as compared with 16,816 in 1947; 622 accidents resulted in casualties in 1948, whereas 838 were recorded in 1947. . . . However, in comparing the accident and casualty rates for the year 1948 with the depression period, the accident rate is still 58.60 per cent higher and the injury rate is up 45.45 per cent, indicating clearly that we have an accident field deserving of our utmost attention."

Trespassing.—"With increased population of our cities and lack of restraint by parents on children, the ineffectiveness of school teachers and principals to control action of their pupils, as well as the laxity of our courts to punish even the most destructive illegal action of juvenile offenders, we can expect that, even with all our efforts, there will be increased trespassing with its attendant injuries and deaths. . . . We must continue to keep the problem ever before the public, ask the cooperation of every employee to assist in cautioning and reporting trespassers and give special attention to the particular spots where the evil is greatest. . . . With the support of all public local community clubs we may be able to keep the evil within reasonable limits."

The closing day of the meeting was devoted to a safety program presented by the Minnesota Safety Council, and featured short talks by 12 leaders in that state's safety work. Emphasized was the cooperation being rendered by newspapers, schools, radio stations and other groups throughout the state. One of the speakers, Max Karl, director of public service for radio station WTCN and chairman of the Minnesota Radio Safety Committee, told the section that radio stations are eager for railroad safety material because of the industry's "romance," and that television stations welcome films. He suggested that railroads let television representatives with movie cameras enter their shops to obtain material, and pointed out the effectiveness of programs in which use is made of tape recorders in locomotive cabs. The latter technique, he said, can be used to combat grade-crossing accidents.

The section passed resolutions calling for the continuation of its efforts toward attaining the following goals: (1) Employment of a full-time safety engineer and a clerk-stenographer to assist him; (2) standardization of handbrakes; and (3) revision of the uniform safety code.

Officers of the section elected for the coming year were: Chairman, D. W. Naff, superintendent of safety, Norfolk & Western; and vice-chairman, J. P. Wadsworth, general safety supervisor of the Canadian National. C. T. DeWitt, superintendent of safety of the Northern Pacific, will continue as news letter editor.

Communications . . .

Tax Relief Would Encourage Railroad Capital Expenditures

CHICAGO

TO THE EDITOR:

In a short talk recently before the Chicago Association of Commerce, Ralph Budd, president of the Burlington, offered some suggestions for improvement in the financial outlook of the railroads. Among them was one which commands immediate attention, because of its novelty, soundness, and simplicity. He said:

"As a partial correction of inequities arising out of government aid to the railways' competitors it would seem fair to authorize the Interstate Commerce Commission to determine the extent to which the cost of a project, desirable in the public interest, constitutes an improvement that would not be profitable for the railroad, and to that extent to authorize deduction from income taxes. Likewise, it would seem fair to permit the railroads to exclude from taxable income, the excess cost of new units above depreciation."

Some students of transportation have suggested that the government ought to subsidize the railroads, as it now subsidizes their competitors, for example, by government acquisition and maintenance of railroad tracks and right of way. Others—more thoughtful, and more sensitive to the implications of such a step—have pointed out that two wrongs do not make a right; that we need less, rather than more, government in transportation; and that the relative merits of our different forms of transportation will never be known until each stands upon its own feet in a free and unsubsidized market.

Mr. Budd seems to have hit upon a cure which is not worse than the disease. His approach is not through subsidy—because he would have the railroads continue to improve, own and maintain their plant, with their own money—but rather, through adjustments in federal taxes.

The first aspect of Mr. Budd's double-barreled suggestion would give the railroads tax relief in connection with fixed property improvements, which otherwise might not be undertaken. He mentions, as examples, revisions in line and grade, elimination of highway crossings, additional signal protection —the type of improvements which the government is making for commercial users of the highways, waterways, and airways. According to Mr. Budd, many such projects would be desirable in the public interest, but would not be profitable or prudent from the standpoint of the railroad investor, or the railroad manager. In such cases, apparently, the benefit to the public would be substantial, but the benefit to the railroad would be too small to justify the capital outlay under present tax laws and regulations. Mr. Budd would have the Interstate Commerce Commission investigate such cases, upon application of the interested railroad, and determine the proportion of total cost which should be allocated to the public interest. The amount thus determined would then be deducted from income taxes, which otherwise would be assessed against the interested railroad.

The second part of Mr. Budd's suggestion involves the problem of finding money to replace worn-out units of equipment or other property when the new units cost twice as much as those they replace, and when much of the money needed for this purpose already has been taxed as profit.

For example, to replace an old car that cost $2,500, with a new car of the same type that today costs $5,000, actually requires $4,032.25, in addition to the $2,500, presumably set aside by accrual of depreciation. This is because current federal income taxes take 38 per cent of taxable income, and it takes $4,032.25 to produce $2,500, after taxes. Thus, when a railroad buys a new car today, it must not only find $2,500 more than was anticipated when the old car was bought, but, in addition, another $1,532.25, with the result that the real cost of the new car, including depreciation, is $6,532.25.

Of course, this example assumes that only one-half the purchase price of the new car ($5,000) will be paid from current earnings; that the balance will be covered by depreciation reserves. If all the money had to come out of income, the actual cost would be $8,064.50, because it takes that much money to produce $5,000, after taxes at 38 per cent.

The suggested tax relief is different in the case of roadway improvements than in the case of depreciation on equipment. In the first case, the deduction would be taken from the ultimate tax—at the bottom of the tax return. In the second case, the deduction would be taken from taxable income—before computation of the ultimate tax. Thus, the relief would be greater in connection with roadway improvements than in connection with replacement of equipment or tools. This difference in treatment could be a powerful incentive in connection with roadway improvements which involve large capital outlays, with little or no return to private interests, but large returns to the public interest. In such cases, there is grave danger that the improvements never would be undertaken in the absence of tax relief. In the case of equipment, on the other hand, there is not much doubt that the necessary cars will be bought or built. The problem is to preserve railroad credit by giving realistic recognition to high replacement costs, inadequate depreciation reserves, and the difficulty of finding the money, after taxes, to make needed replacements. This is a serious problem, but apparently it can be met by a deduction from "taxable income," as distinguished from a deduction from "taxes."

If it should be suggested that the government cannot afford this tax relief, at least two answers come to mind. First, this relief would correct discrimination between taxpayers—like the discrimination in favor of husbands and wives in community property states, which was recently corrected by Congress—and hence is not to be judged by its revenue effect. Second, and more important, the resulting tax reduction would be a drop in the bucket compared to government expenditures for public projects which have far less economic justification than the preservation of the American railroad system under private ownership.

FINANCE OFFICER

Omission Supplied

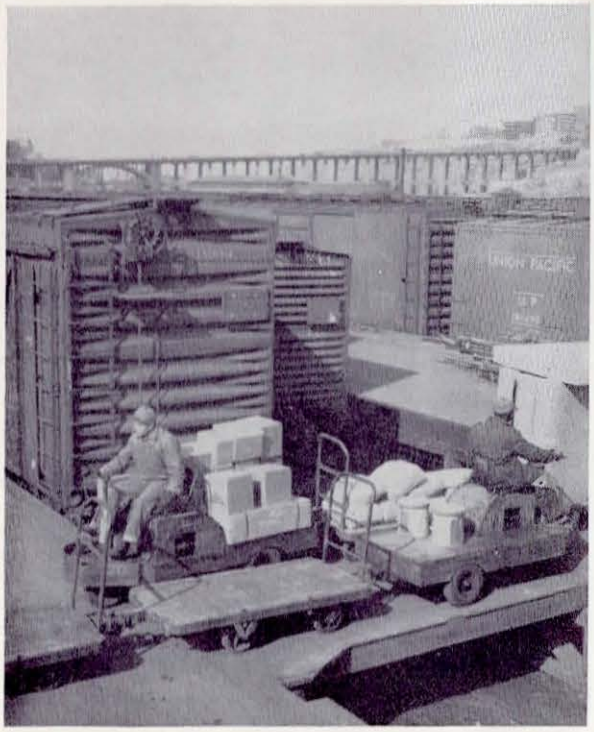
LONDON, ENG.

TO THE EDITOR:

In *Railway Age* of April 23, on page 27 there appears to be an error at the end of the second paragraph of the editorial article entitled "Socialism by Democratic Process." I believe that the statement should have read as follows: "Under the system in Great Britain the individual is still in most ways a free man who can criticise and vote against the party in power, *except in nationalized industries such as railways.*"

Words that your printer clearly left out in error are underlined.

"RAILWAY OFFICER"



Above left—Chore Boy trains pass in opposite directions. Fixed traffic lanes are established to prevent conflicting moves. Transfer bridges help keep distances down and increase the number of loaded hauls per truck per day. Above right—A 4,000-hp. fork-lift truck runs onto a highway trailer to pick up a heavy piece of air-conditioning machinery. The fork truck will take its load to the freight car without further handling

Freighthouse Mechanization Boosts Efficiency

Complete substitution of ordinary hand-trucking produces substantial benefits at Kansas City freight station of the Santa Fe

Mechanization of virtually all platform operations at the Kansas City (Mo.) freighthouse of the Atchison, Topeka & Santa Fe—along with modern communications facilities—has enabled the road to eliminate congestion and speed service, and, at the same time, accomplish definite economies.

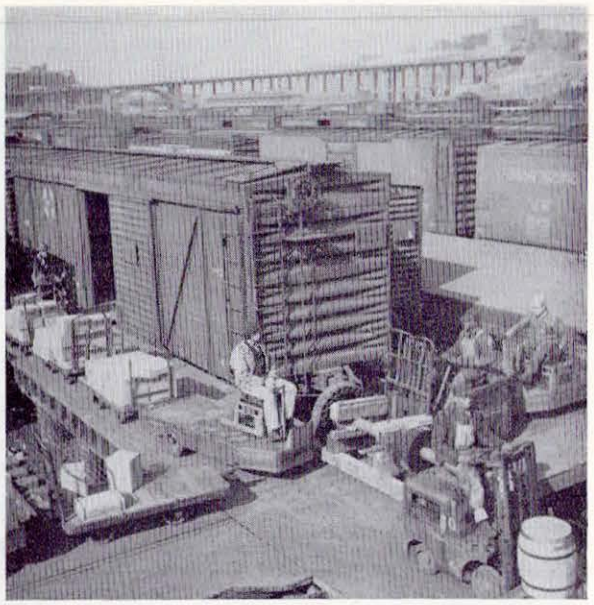
The first step in mechanization was taken in July, 1946, with the acquisition of 10 burden-carrying trucks —three-wheeled gasoline-powered units each of 1,000-lb. capacity. Good results were obtained at once; congestion of the aisles of the busy station was relieved, and operations generally proceeded more rapidly. Following receipt of additional burden-carrying trucks and fork-lift trucks, the benefits of mechanization were found to be definitely cumulative, and a program was set up so that, by October, 1948, all ordinary hand trucking operations were eliminated. The Kansas City station handles not only inbound and outbound city freight, but transfer operations as well; in fact, Kansas City is the largest transfer point on the Santa Fe system. Current traffic averages 60 to 65 carloads inbound and 90 to 110 outbound daily.

The following equipment is employed in the platform operation:

27	Buda "Chore Boys," 1,000-lb. cap.
9	Clark fork-lift trucks, 1,000-lb. cap.
4	Clark fork-lift trucks, 2,000-lb. cap.
1	Automatic fork-lift truck, 4,000-lb. cap.
2	Mercury "Banty's"
700	double-face hardwood pallets
406	four-wheel-trailers (rubber-tired, roller bearing)
10	T-cross dollies
1	8-section roller conveyor
1	8-section skate conveyor
10	loud speakers and paging units

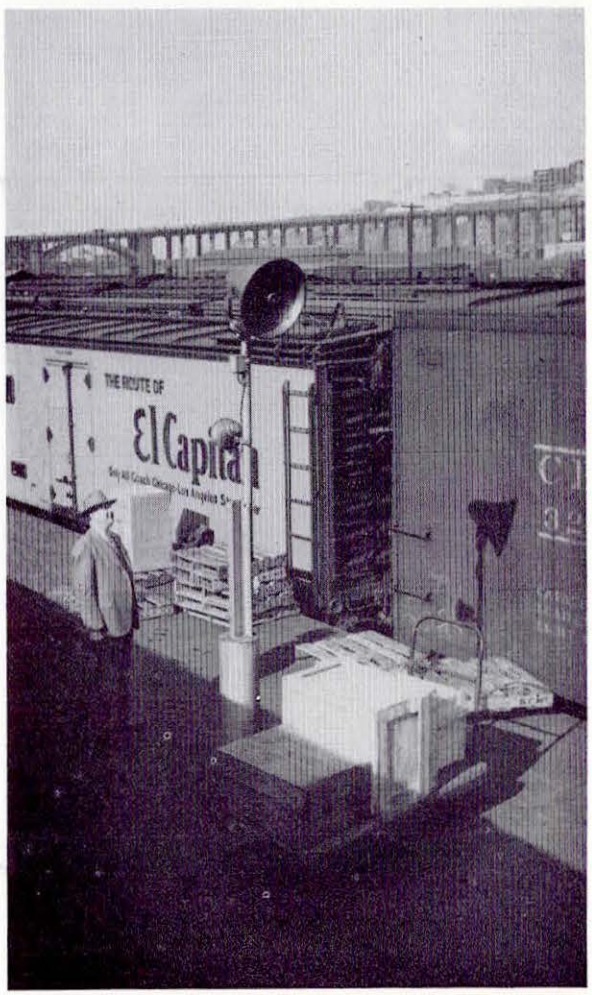
Six house tracks provide spotting space for a total of 186 cars. On the west side of the station there is

Unloaders place freight on four-wheel trucks for the Chore Boys, or on pallets for the fork trucks



All of these mechanized loads would have passed this single point within an interval of about two minutes had they not been held up for the photographer

Freight Agent Traylor, quickly located on the platform by one of ten paging units, carries on a conversation with the routing clerk



a covered platform with docking space for highway trucks. To the north, there are two island platforms each 8 ft. wide and one island platform 22 ft. wide, each about 1,350 ft. in length. Three bridges of 8-ft. width and a wide dock at the track end provide four lanes for cross traffic and make short runs possible.

The station was originally built in 1881 and is in an area which has since grown around it so as to prohibit expansion. This has enhanced the benefits from mechanization, which has enabled the Santa Fe to continue efficient operations where any substantial enlargement of the existing fixed facility is not practicable. The wooden platforms are entirely covered with boiler plate—and were even during hand truck operations—and have proved very satisfactory from the standpoint of low maintenance cost, easy snow removal and good traction.

Communications a Real Asset

The Chore Boys, in addition to handling a load on their own platforms, pull in tow one heavily loaded four-wheel truck, or up to four lightly loaded four-wheel trucks. In actual operation it has proved faster to have the stowers load the four-wheel trucks while they are standing, keeping the motorized units in motion. Quickly loaded light packages are placed on their platforms. The fork trucks are used in loading and unloading cars and in handling bulky commodities. A recent check shows that they make an average of 95 loaded trips daily. Set traffic lanes are established on all the platforms and bridges. Between 2 p.m. and

Meat shipments—arriving just before closing time—are speedily unloaded on roller conveyors and placed on four-wheel trucks to be moved to various outbound cars by the motorized trucking gangs

The routing clerk keeps in touch with all operations through the communication control panel on his desk

closing time—when 80 per cent of the volume is handled—there is a continuous flow of equipment over the platform area.

The biggest rush occurs just before closing time when the meat packers arrive with perishable shipments. Here, as in many other instances, a two-way communications system, with loud-speakers located at ten spots in the platform area, plays an important part. When the first meat trucks arrive, for example, the routing clerk announces "all truck gangs to the meat dock."

The communication facilities are used extensively to direct the gangs to points where they are most needed. For example, the 4,000-lb. fork-lift truck may be required at a specific spot where the unloaders have encountered an awkward shipment. The routing clerk is informed through the nearest paging unit, and instructions are relayed over all the loud-speakers so the fork truck can hasten to give aid.

Block or spot changes are announced over the speakers so that this important information reaches all concerned in a matter of seconds. Prompt advice as to which cars have reached their capacity enables platform truckers en route thereto to alter their course to other locations. Relay of such information to operating personnel formerly took a clerk nearly half an hour.

Maintenance Practices

Early maintenance practices were more or less irregular—a procedure which quickly proved to be unprofitable. One full-time mechanic is now assigned to the progressive maintenance, fueling and lubrication of all the mechanized equipment, working in a special shop which serves as a "garage" after closing time. Maintenance is a routine operation, and almost all of the equipment is in serviceable condition at all times.

The Kansas City station operations are under the direct supervision of J. M. Traylor, freight agent. The communications system was installed by the R. W. Neill Company of Chicago.

THE EMPLOYEE'S PART IN COST CONTROL

Management's responsibility is to make the worker realize his own welfare depends on a high standard of productivity

By C. I. CLUGH
Works Manager, Altoona Works
Pennsylvania

Part of the appeal of the career of railroading is the variety of problems that come in the normal course of a day's work. The ability to meet the challenge of those problems is a characteristic of a good railroader. The present day conversion of the motive power from steam to Diesel is just another example of this ability to meet the changing times, and to successfully compete in the ever increasing tempo of modern business.

The very method of operation of our stores and material supplies has undergone a radical change in the recent years. All types of motive power equipment today are greatly improved, and are made up of a far greater number of manufactured or prefabricated parts and appurtenances. This fact, together with the increased demand for greater availability, has made proper management of the plant more and more dependent upon a steady and current flow of supplies and materials from the railway equipment manufacturers.

Closer coordination of our purchases and stores departments with the suppliers, is, of necessity, the order of the day.

Management's Duties

Not the least of management's problems is that of developing a competent supervisory force to carry out the plans that must be put into practice by the man on the ground. Only by careful selection of the right type of individual for the job; by proper training and instruction; and by well planned promotions can the necessarily high type of supervision be built up to carry out the best plans. The good supervisor must not only know a particular job or trade, he must know his men. He must know how to handle them so as to get them to work efficiently and safely. He must be sufficiently informed on the local labor laws and agreements so as to protect the company's interests properly, and at the same time not violate the worker's rights to the disinterest of the company. Ever conscious of the high costs of operation, he must do everything possible to prevent waste of time, material and energy. By reason of these many requirements, the duties of supervisors have become more and more complex but at the same time they tend to develop a more highly intelligent and effective type of leadership—the sort of management representative so greatly needed in dealing with one of the greatest of all problems, that of human relations.

Since the success of an enterprise is mainly the result of human effort, properly directed, it is the management's prime concern to coordinate the wills of men toward the desired goal. Grievances are bound to arise wherever human natures may conflict. A good grievance handling system is the strongest tool for reducing and forestalling such disturbance to the smooth operation of a plant.

Today, we must deal with not one, but a score or more of duly authorized bargaining agents in our labor relations. This fact in itself presents a delicate problem of handling those relationships in an equitable manner. Although each of the organizations representing the various groups of employees may be entirely independent of the others, nevertheless action taken with one must comprehend the effect upon, or the equity of, the other groups. Like a man with a family of twenty or more, to give one a piece of candy or a pair of shoes means twenty pieces of candy or twenty pairs of shoes. To demand from one requires bringing twenty into line. Through diligent efforts on the part of both sides of the labor-management relationship, it has been found that their interests are not necessarily diametrically opposed. Intelligent labor leadership affords strong support in the present day problems of worker efficiency. Greater concern is being shown for the well being of employees, and through education in the operating problems confronting modern business, the employees are showing an increasing awareness of their responsibility in contributing to the success of the business. This has resulted in better train performance, less loss and damage, less train accidents and lower personal injury rates. This knowledge of the problems confronting them has extended a challenge to the railroad worker which he is accepting with a noticeable increase in morale.

Poor Workmanship Is Costly

With the gradual reduction in the margin between operating income and expense it has become increasingly important that the employees be educated in cost consciousness. We have found it necessary to wage a

Condensed from an address at a recent meeting in Boston, Mass., of the New England Railroad Club.

vigorous campaign against all forms of inefficiency, particularly the factors of waste, poor workmanship, absenteeism and loafing, low production and unsafe practices. By warning the employee against these factors which are within his control, the manager is thereby able to appeal to the worker's intelligence to recognize his rightful responsibilities to the company and to himself.

It is not at all difficult to convince the worker that waste of material and poor workmanship cause costs to rise.

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For example: suppose he loafs along and makes only one unit in a given time. He is paid one dollar. If the job required one dollar's worth of material, and overhead costs for heat and light, taxes, insurance, shop force and maintenance, etc., amounted to one dollar, then the cost of the whole job would be three dollars per unit. If, on the other hand, the same worker will speed up production and make two units in the same period of time, the costs can be considerably reduced. He will be paid two dollars; two dollars' worth of material will be used; but the overhead charges will remain at one dollar for that same period of time. Thus the cost of two units will be five dollars, or two dollars and fifty cents, instead of three dollars, per unit. Producing three units will drop the costs to two dollars and thirty-three cents, and so on. These are imaginary figures but the principle can be carried out in actual practice.

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The demands on railroad transportation have accelerated in recent years far beyond the former rate of expansion. Where volume alone was at one time the main factor of demand, new dimensions have now appeared. Competition from other agencies of transportation, at first not a factor at all, has become one of the greatest elements affecting demand. Increased regulation of the industry and higher costs have stepped up the need for efficiency. The elements of speed, weight and reliability of service have all been introduced as factors stimulating demand.

In order to meet and better cope with the increased requirements of the service the railroads are now, for the first time in their history, reaching out to another type of motive power. They are undergoing, to a major degree, conversion from steam power to Diesel power.

It is true that some railroads have employed electric power taken directly from overhead wire or third rail, but never to the extent that Diesel-generated electric power is now and will be used.

Management of the railroads, during this conversion, is confronted with problems never before experienced in the history of the industry. Operating practices have to be altered to utilize fully and properly the services that can be performed by these new locomotives. Schedules have to be changed for the heavier and faster trains. Roadbed is being improved to carry greater loads rolling at high speed, and more efficient braking equipment is being provided to adequately serve the new requirements. Personnel must be trained to operate the Diesel-powered trains and even the traffic department is reaching for the new selling points that the improved service has to offer their customers.

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Greatest among these changes are those confronting the management of the motive power or mechanical departments. Entire shops and enginehouse facilities have to be revamped to handle the new type of work. Mechanics who for years have worked to tolerances of a thirty-second of an inch must now think in terms of a thousandth or ten-thousandth of an inch. Some crafts or trades are now in greater demand than before while others are required in less numbers. Men who have learned one trade find their craft no longer needed and must convert their training along more useful lines consistent with the new work requirements.

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Indeed careful planning is an absolute necessity in controlling this greatest transition in such a manner that the vast job of training large groups of employees, the retooling of entire shops, and the conversion of enginehouse facilities, will not be misdirected and rendered useless should another motive power revolution shortly follow the "Diesel era."

THE EMPLOYEE'S PART IN COST CONTROL

Management's responsibility is to make the worker realize his own welfare depends on a high standard of productivity

By C. I. CLUGH
Works Manager, Altoona Works
Pennsylvania

Part of the appeal of the career of railroading is the variety of problems that come in the normal course of a day's work. The ability to meet the challenge of those problems is a characteristic of a good railroader. The present day conversion of the motive power from steam to Diesel is just another example of this ability to meet the changing times, and to successfully compete in the ever increasing tempo of modern business.

The very method of operation of our stores and material supplies has undergone a radical change in the recent years. All types of motive power equipment today are greatly improved, and are made up of a far greater number of manufactured or prefabricated parts and appurtenances. This fact, together with the increased demand for greater availability, has made proper management of the plant more and more dependent upon a steady and current flow of supplies and materials from the railway equipment manufacturers.

Closer coordination of our purchases and stores departments with the suppliers, is, of necessity, the order of the day.

Management's Duties

Not the least of management's problems is that of developing a competent supervisory force to carry out the plans that must be put into practice by the man on the ground. Only by careful selection of the right type of individual for the job; by proper training and instruction; and by well planned promotions can the necessarily high type of supervision be built up to carry out the best plans. The good supervisor must not only know a particular job or trade, he must know his men. He must know how to handle them so as to get them to work efficiently and safely. He must be sufficiently informed on the local labor laws and agreements so as to protect the company's interests properly, and at the same time not violate the worker's rights to the disinterest of the company. Ever conscious of the high costs of operation, he must do everything possible to prevent waste of time, material and energy. By reason of these many requirements, the duties of supervisors have become more and more complex but at the same time they tend to develop a more highly intelligent and effective type of leadership—the sort of management representative so greatly needed in dealing with one of the greatest of all problems, that of human relations.

Since the success of an enterprise is mainly the result of human effort, properly directed, it is the management's prime concern to coordinate the wills of men toward the desired goal. Grievances are bound to arise wherever human natures may conflict. A good grievance handling system is the strongest tool for reducing and forestalling such disturbance to the smooth operation of a plant.

Today, we must deal with not one, but a score or more of duly authorized bargaining agents in our labor relations. This fact in itself presents a delicate problem of handling those relationships in an equitable manner. Although each of the organizations representing the various groups of employees may be entirely independent of the others, nevertheless action taken with one must comprehend the effect upon, or the equity of, the other groups. Like a man with a family of twenty or more, to give one a piece of candy or a pair of shoes means twenty pieces of candy or twenty pairs of shoes. To demand from one requires bringing twenty into line. Through diligent efforts on the part of both sides of the labor-management relationship, it has been found that their interests are not necessarily diametrically opposed. Intelligent labor leadership affords strong support in the present day problems of worker efficiency. Greater concern is being shown for the well being of employees, and through education in the operating problems confronting modern business, the employees are showing an increasing awareness of their responsibility in contributing to the success of the business. This has resulted in better train performance, less loss and damage, less train accidents and lower personal injury rates. This knowledge of the problems confronting them has extended a challenge to the railroad worker which he is accepting with a noticeable increase in morale.

Poor Workmanship Is Costly

With the gradual reduction in the margin between operating income and expense it has become increasingly important that the employees be educated in cost consciousness. We have found it necessary to wage a

Condensed from an address at a recent meeting in Boston, Mass., of the New England Railroad Club.

vigorous campaign against all forms of inefficiency, particularly the factors of waste, poor workmanship, absenteeism and loafing, low production and unsafe practices. By warning the employee against these factors which are within his control, the manager is thereby able to appeal to the worker's intelligence to recognize his rightful responsibilities to the company and to himself.

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GENERAL NEWS

Senate Group Plans Broad Transport Study

Will cover "all aspects" of problem, Senator Myers says

A subcommittee of the Senate committee on interstate and foreign commerce plans an investigation of the "nation's domestic surface transportation system" which will encompass "every aspect of the problem," according to a May 28 announcement by the subcommittee's chairman, Senator Myers, Democrat of Pennsylvania. Authority to conduct the investigation was carried in Senate Resolution 50, under which another subcommittee of the interstate and foreign commerce committee has been conducting an investigation of domestic air transportation.

Other members of the subcommittee headed by Senator Myers are Senator Johnson, Democrat of Colorado, who is chairman of the parent committee, and Senators Johnson, Democrat of Texas, and Reed of Kansas and Bricker of Ohio, Republicans. The subcommittee has appointed a staff, headed by E. R. Jelsma, which is "now engaged in the compilation of basic data for use in the investigation," Chairman Myers said. He added that this staff work "will lay the groundwork for explorations by the subcommittee members into matters of policy and operation."

As outlined further by Mr. Myers, the inquiry will include a "comprehensive study" of the operations of "all domestic land and water transportation facilities," including the following: (1) Steam and electric railroads; (2) inland water carriers; (3) motor carriers of passengers and freight; (4) Railway Express Agency; (5) Pullman Company; (6) pipe lines; (7) railroad holding companies; (8) freight forwarders.

"We are," the chairman continued, "particularly interested in factors such as the effect of large expenditures of public funds and of private funds upon transportation charges to the public, and to what extent transportation rates are reflected in the cost of goods and services to the consumer. We want to determine whether existing transportation policies conform to the national transportation policy as set forth in the Transportation Act of 1940—and whether changes of any nature are required in that policy in view of changing conditions in the economy generally.

"We want to determine whether present policies in domestic land and water transportation provide for fair and impartial regulations; for the promotion of safe, adequate, economical and efficient service; for the fostering of sound economic conditions in transportation and among the several carriers. We want to know whether they provide for the establishment and maintenance of reasonable charges for transportation services; for the promotion of cooperation with the several states; for the development, coordination and preservation of a strong national transportation system by rail, air, water, and highway.

"We are going to look into the status of wage levels and working conditions in the transportation field. We also seek to learn whether our transportation system is adequate not only to meet the needs of an expanding American economy and our postal service but whether it is adequate in terms of national defense needs."

Calls Storage "Major" Grain-Handling Problem

Gass says roads can haul "every bushel" that elevators can take

Storage space rather than box car supply will be the "major problem" in connection with the movement of this year's "bumper" winter wheat crop which is now being harvested, Chairman Arthur H. Gass of the Car Service Division, Association of American Railroads, said in his latest monthly review of the "National Transportation Situation." Conceding that the railroads' task of moving the new crop while they are still moving the "tremendous" carryover of last year's yield would "ordinarily" place a "terrific" burden on the available car supply, Mr. Gass noted that 42.2 per cent of the country's public elevator space was filled on May 7 as compared with 21.4 per cent on the same date last year.

Thus he considered it "safe to say" that the grain roads "will be able to furnish a sufficient number of cars to take care of every bushel of grain for which storage space is available." Meanwhile he referred to the railroads' undertaking to work out with the Commodity Credit Corporation arrangements whereby the "very large volume" of old grains, held on farms and in country storage under government loan and purchase-agreement contracts, could have been moved into terminal and semi-terminal storage "well in advance of the new harvest." While it is now doing "everything possible" to clear this carryover, the C.C.C. did not find it "practicable" to get the clearance program under way until after April 30, when the loan and purchase-agreement contracts expired.

Not Enough Boats

Reporting on the situation as to grain exports, Mr. Gass said that the failure to meet the April goal was due to "lack of boats rather than box cars." Only 47,973,820 bushels were exported during that month when the program called for the export of 65,855,286 bushels. But the C.S.D. chairman pointed out that there were "approximately 21,600,000 bushels at the ports and 5,300,000 bushels in transit at the end of the month."

Of the box car situation as a whole, Mr. Gass said that "generally speaking" all requirements for such cars are being met—"except for a minor shortage of cars to load lumber from the Pacific Northwest." Shortages of box cars during the week ended May 7 averaged 111 cars daily, as compared with 1,354 daily during the corresponding 1948 week. Daily surpluses averaged 32,912 cars and 1,366 cars, respectively.

As to ventilated box cars, the C.S.D. chairman does not anticipate any difficulty in handling the movement of watermelons which is now getting under way in the Southeast. The roads which originate this traffic have an "adequate supply" of such cars, he said. Also, the supply of both single and double-deck stock cars is "satisfactory on all roads, and requirements are being taken care of currently." The refrigerator car situation, too, is favorable, "good progress" having been made in relocating the fleet during the recent period of light loading. At the same time, Mr. Gass predicted that reefer loadings in the West will be "exceptionally heavy" this summer.

Noting that recent demands for coal have been "moderately heavy," Mr. Gass went on to report that there had been no car shortages at the mines. He suggested that this may be accounted for "by the decreased requirements compared with past years and also the fact that the railroads have added about 30,000 hopper cars to their ownership since May 1, 1948." As to the lake-cargo coal and ex-lake iron ore movements, Mr. Gass noted that the early opening of navigation got these programs off to a good start. On the tentative program of 48 million tons of coal, 15.4 per cent had been handled over Lake Erie docks to

The largest steel girder to be used in construction of New York City's new East River drive, and one of the heaviest pieces of structural steel to be delivered to Manhattan Island in recent years, being unloaded at the Pennsylvania's freight yard at West 37th street and 11th avenue, New York. The girder, which weighed 92 tons, and measured 130 ft. long, 10 ft. high and 2 ft. wide, required three flat cars for its trip to New York via the Pennsylvania from the Bethlehem Steel Company's plant at Pottstown, Pa., where it was fabricated

May 9, while ore shipments from the head of the lakes to the same date amount to 14.6 per cent fulfillment of the 85 million ton objective. The respective percentages as of the same date last year were 8.1 and 12.3.

Open-top Situation

Of the hopper car supply, Mr. Gass said that it had "tightened up" in Eastern-Allegheny territory during the past few weeks, but "no serious difficulty is anticipated in meeting requirements for this type of equipment." The supply of gondolas remains "rather tight" throughout the country, but especially in the East. In that connection, however, Mr. Gass did not think it likely that steel production during coming weeks will be "quite up to the all-time record tonnage produced in the first quarter." And he noted that the movement of road building materials "has not been up to expectations," hence gondola loadings of sand and gravel "are still trailing those of the like period last year."

Demands for flat cars have not been "particularly heavy," except as to the longer types of such cars, for which "there continues to be a very heavy requirement for the movement of agricultural machinery from manufacturing areas in the Middle West." Neither has there been any relaxation "in the unusual number of orders for well and depressed-center flats and those of unusually large capacity." As to covered hoppers, Mr. Gass noted that loadings are running 4.3 per cent above last year; and he thought it "likely" that the movement of construction materials in such cars would continue to increase.

The report's figures on the average turn-around time of freight cars showed that this was 15.48 days in April as compared with 15.73 days in April, 1948. The number of cars detained beyond free time in April averaged 15.28 per cent of the total placed, the lowest since November, 1947, when detention was 14.6 per cent. The April, 1948, figure was 16.16 per cent.

Upholds Venue Changes In Liability-Act Cases

Supreme Court rules that transfers can now be made

Last year's revision of Title 28 of the United States Code gave federal district courts authority to transfer actions brought under the Federal Employers' Liability Act to other district courts which they consider more convenient for the parties, the United States Supreme Court ruled in a May 31 decision. The court's 7-to-2 opinion, delivered by Chief Justice Vinson, held that the code revision, which became effective September 1, 1948, rendered the doctrine of *forum non conveniens* applicable to actions under the liability act and thus modified that act's section 6 which stipulates that actions may be brought not only in the district of the defendant railroad's "residence," or in the district in which the cause of action arose, but also in any district "in which the defendant shall be doing business at the time of commencing such action."

It was because of the concentration of actions in selected districts under this latter provision that the railroads have been sponsoring legislation to limit the venue in such cases. Such legislation was proposed in the Jennings bill which failed of enactment in the previous Congress, but no similar bill has yet been introduced in the present Congress. The Supreme Court's determination came in a case which was docketed in that court as No. 206 Miscellaneous, Ex Parte Joseph Collett, Petitioner. The petitioner had instituted an action against the Louisville & Nashville in October, 1947, in the United States District Court for the Eastern District of Illinois, but no trial was had before the effective date of the code revision—September 1, 1948, as noted above.

Thereafter the railroad filed a motion to transfer the case to the district court for the Eastern District of Kentucky. The court, i.e., the court in which the suit was originally filed, granted this motion, finding that it was thereby giving the parties a more convenient forum. Mr. Collett then appealed directly to the Supreme Court, contending that the transfer exceeded the district court's authority.

In the discussion leading to its upholding of the transfer, the Supreme Court's opinion noted first that, prior to last year's revision of the code, *forum non conveniens* was not available in suits under the Federal Employers' Liability Act. It went on to point out, however, that the revision provides that "for the convenience of parties and witnesses, in the interest of justice," a district court "may transfer any civil action to any other district court where it might have been brought." It also referred to a reviser's notes accompanying the code which said that the foregoing provision was designed to permit "transfer to a more convenient forum, even though the venue is proper." The notes cited, "as an example of the need for such a provision," a case against the Baltimore & Ohio," which was prosecuted under the Federal Employers' Liability Act in New York, although the accident occurred and the employee resided in Ohio."

After expressing its agreement with the district court's conclusion that the application of the code to "any civil action" was "without qualification, without hint that some should be excluded," the Supreme Court nevertheless proceeded to examine various contentions on which the petitioner relied. It identified the latter's "chief argument" as one which proceeded from the legislative history of the code revision, and found that argument based on these premises: Congress intended no "controversial" change to be incorporated in the code;

and the code section at issue, section 1404(a), is "controversial."

To establish the former premise, the petitioner cited a number of statements by congressmen in charge of the code revision; and he contended that these statements were made while Congress was aware of the "controversial" nature of the venue limitations proposed by the Jennings bill which was pending at the same time. The court called the Jennings bill "far more drastic" than section 1404(a) of the code, and concluded that the latter "might well be considered 'non-controversial' by the same Congress which would regard the Jennings bill as 'controversial.'" It then went on to characterize the legislative-history argument as one "based not on the actual legislative history of section 1404(a), but on necessarily vague speculation as to what Congress might have done had it fully realized that *forum non conveniens* was henceforth to be applicable in Federal Employers' Liability Act suits." That Congress appreciated the significance of its action was indicated to the court by the fact that the legislators had before them the reviser's notes (mentioned above) which cited the B. & O. case "as demonstrating the need for section 1404(a)."

"What we hold," the court said in closing, "is that the plain meaning of the statutory words and the consistent course of the legislative history are opposed to petitioners contention that we must disregard section 1404(a) because Congress knew not what it did. If petitioner's showing could sustain a decision that this section was not really enacted after all, little law would remain."

On the basis of its determination in the foregoing case, the court on the same day upheld an order of the United States District Court for the Southern District of New York which transferred an action against the Texas & Pacific from that court to the United States District Court for the Northern District of Texas. That, too, was a 7-to-2 decision, announced also by Chief Justice Vinson; and the case was docketed in the Supreme Court as No. 233 Miscellaneous, Jessie A. Kilpatrick, Petitioner, vs. The Texas and Pacific Railway Co.

The dissenters in both cases were Justices Black and Douglas, who said that they disagreed with the majority for reasons stated in their dissenting opinion in another like case which was also decided on May 31—No. 269 Miscellaneous, The United States of America, vs. National City Lines, Inc. In that case the majority opinion, again by Chief Justice Vinson, held that the revision of the judicial code also extended the doctrine of *forum non conveniens* to anti-trust suits. It upheld the transfer of the case from the federal court at Los Angeles, Calif., to the federal court at Chicago. This case involves the government's anti-trust complaint against National which controls companies operating local transit services in various cities.

The Douglas-Black dissent was written by the former, who said there were "difficulties" however the cases were decided. "But," Justice Douglas added, "I have concluded that the fairer result is reached if the ambiguities and doubts . . . are resolved by reading section 1404(a) as making the doctrine of *forum non conveniens* applicable to any civil action as to which the venue provisions are codified in revised Title 28. That gives full effect to the words 'any civil action' in the field in which Congress was legislating." Justice Douglas went on to say that he was "reluctant" to conclude that Congress took "more drastic action in a mere revision of the code." To hold that it did he added, makes the "basic change" apply to many statutes in addition to the two involved in the present cases.

Justice Rutledge filed a separate expression applying to all three cases. He said he concurred "in the result" of the majority opinions, but he was unable to agree with the majority view that Congress was "fully informed as to the significance of section 1404(a)." He added: "This, however, is a matter affecting congressional procedure and the manner of conducting legislative business. Accordingly, notwithstanding my doubts that Congress intended to go so far, I acquiesce in the court's decisions."

4 Months Net Income Totaled $98,000,000

Net railway operating income was $193,261,747

Class I railroads in the first four months of this year had an estimated net income after interest and rentals, of $98,000,000, as compared with $102,000,000 in the corresponding period of 1948, according to the Bureau of Railway Economics of the Association of American Railroads. The four-months' net railway operating income, before interest and rentals, was $193,261,747, as compared with $195,892,402.

Estimated results for April showed a net income of $40,000,000, as compared with $27,500,000 for April, 1948, while the net railway operating income for the 1949 month was $64,759,903, as compared with $53,168,256 for April, 1948. In the 12 months ended with April, the rate of return averaged 4.23 per cent, as compared with 3.24 per cent for the 12 months ended with April, 1948.

Gross in the four months amounted to $2,892,753,080 compared with $2,972,210,496 in the same period of 1948, or a decrease of 2.7 per cent. Operating expenses amounted to $2,366,249,900 compared with $2,406,596,014, a decrease of 1.7 per cent. Thirty-four Class I roads failed to earn interest and rentals in the four months, of which 12 were in the Eastern district, 3 in the Southern region, and 19 in the Western district.

CLASS I RAILROADS — UNITED STATES

	Month of April	
	1949	1948
Total operating revenues	$747,259,313	$ 728,968,959
Total operating expenses	594,269,852	585,625,470
Operating ratio—per cent	79.53	80.34
Taxes	74,794,116	75,356,189
Net railway operating income (Earnings before charges)	64,759,903	53,168,256
Net income, after charges (estimated)	40,000,000	27,500,000
	Four Months Ended April 30, 1949	
Total operating revenues	$2,892,753,080	$2,972,210,496
Total operating expenses	2,366,249,900	2,406,596,014
Operating ratio—per cent	81.80	80.97
Taxes	280,229,564	312,579,377
Net railway operating income (Earnings before charges)	193,261,747	195,892,402
Net income, after charges (estimated)	98,000,000	102,000,000

Class I roads in the Eastern district in the four months had an estimated net income of $51,000,000 compared with a net income of $22,000,000 in the same period of 1948. For April, their estimated net income was $20,000,000 compared with $5,000,000 in April, 1948.

Those same roads in the four months had a net railway operating income of $103,843,562 compared with $66,462,836 in the same period of 1948. Their net railway operating income in April amounted to $33,718,104 compared with $17,583,834 in April, 1948.

Gross in the Eastern district in the four months totaled $1,343,048,516, a decrease of 0.2 per cent compared with the same period of 1948, while operating expenses totaled $1,087,619,620, a decrease of 3.3 per cent.

Class I roads in the Southern region in the four months had an estimated net income of $24,000,000 compared with a net income of $27,000,000 in the same period of 1948.

For April, they had an estimated net income of $6,000,000 compared with $5,500,000 in April, 1948.

Those same roads in the four months had a net railway operating income of $39,545,494 compared with $43,141,608 in the same period of 1948. Their net railway operating income in April amounted to $9,588,768 compared with $9,171,248 in April, 1948.

Gross in the Southern region in the four months totaled $419,662,310, a decrease of 4.1 per cent compared with the same period of 1948, while operating expenses totaled $331,969,018, a decrease of 2.3 per cent.

Class I roads in the Western district in the four months had an estimated net income of $23,000,000 compared with $53,000,000 in the same period of 1948. For April, they had an estimated net income of $14,000,000 compared with $17,500,000 in April, 1948.

Those same roads in the four months had a net railway operating income of $49,872,691 compared with $86,287,958

in the same period of 1948. Their net railway operating income in April amounted to $21,453,031 compared with $26,413,174 in April, 1948.

Gross in the Western District in the four months totaled $1,130,042,254, a decrease of 5 per cent compared with the same period of 1948, while operating expenses totaled $946,661,262, an increase of 0.5 per cent.

I.C.C. Honors Employees Killed in World War II

A memorial plaque in honor of seven former employees of the Interstate Commerce Commission, who were killed while serving in the armed forces during World War II, was dedicated at ceremonies in Washington, D. C., on May 26. The plaque, which will be placed in the memorial rotunda between the main hearing rooms on the first floor of the commission's building, was presented to the commission by the In-Com-Co Club, an organization of its employees.

The presentation was made on behalf of the club by Commissioner J. Monroe Johnson, while Commissioner Clyde B. Aitchison accepted on behalf of the commission. Presiding at the ceremonies was the club's president, Charles L. Harrison, who is assistant to the director of the commission's Bureau of Service. The plaque was unveiled by Mrs. Nadah L. Smith, a Gold Star Mother.

Railroads Oppose Legislation To Change Mail-Pay Procedures

Fourteen railroad executives appeared last week before a subcommittee of the Senate committee on post office and civil service to oppose a bill which would change present procedures for the determination of railway mail pay. The bill, favored by the Post Office Department, is S.1596, which was introduced by Senator Johnston, Democrat of South Carolina.

Among other things, it would make it the duty of railroads to furnish information requested by the Postmaster General, and it would permit the withholding of mail pay from roads which did not meet such requests to the satisfaction of that official. The railroad executives who registered their opposition at last week's hearing included Guernsey Orcutt, general attorney of the Pennsylvania and chief counsel for the carriers in the mail-pay case now pending before the Interstate Commerce Commission.

Mr. Orcutt described the bill generally as one which would grant to the Post Office Department "the power to intimidate." The proposed legislation, he said, "is entirely unnecessary in view of the existing statutes through which the department can secure any information proper for it to have by simply presenting that request" to the I.C.C. Denying that the railroads have refused to cooperate with the department in providing pertinent information in the mail-pay proceeding, Mr. Orcutt stated that the carriers are willing at all times to make any sort of study which the I.C.C. thinks is necessary or helpful.

He also told the subcommittee that the railroads recently agreed to make the special cost study at 200 stations requested by the Post Office Department. The carriers, he added, have felt that this study was unnecessary in view of the fact that such a study had already been made at all of the 42,000 or more stations at which railway mail is handled. He went on to explain that the restudy at the 200 stations will be in addition to four studies which the railroads have under way to provide information sought by the department. Of this whole set-up of studies, Mr. Orcutt said that "never before has anything so costly, so extensive, so voluminous in resulting reports and information ever been undertaken or even thought necessary or worthwhile."

The railroads, he continued, are trying to get the department to submit the mail-pay case to the I.C.C. before the end of this year, but the department has indicated that it will not be ready to do so "until late spring of 1950." On that basis, Mr. Orcutt said, the carriers will have been forced to wait four years from the date of their application for a final decision; and meanwhile they "will have been obliged to transport mail at less than fair and reasonable compensation."

One railroad president, Charles H. Buford of the Chicago, Milwaukee, St. Paul & Pacific, appeared to deny that his road had operated mail cars for the exclusive purpose of getting empty return pay. In this connection, representatives of the Post Office department have charged the railroads with "featherbedding," alleging that there have been cases wherein a car used for handling mail in one direction was returned empty, the railroads avoiding its use for other traffic because the mail pay applies to empty as well as loaded movements. While Mr. Buford's denial of such allegations applied only to his road, he said he would be "much surprised to find that anything of this sort ever took place on a western road."

Peter J. Schardt, chairman of the railroads' committee on railway mail transportation, defended present procedures for fixing mail pay. Also, he denied that his committee is under the direction of the Association of American Railroads. In that connection he pointed out that the committee "long antedates" the association, having been organized in 1909. Expressing the opposition of the American Short Line Railroad Association, C. A. Miller, its vice-president and general counsel, said that enactment of the bill would put any railroad transporting mail "at the complete mercy of the Postmaster General." He added that the proposal "more nearly approaches the ideology of the police state than anything that has come to my attention," and that "it would be a denial of justice, a taking of the properties of the carriers without just compensation, and contrary to the public interest."

The other 10 railroad executives supplemented the foregoing presentations and discussed other phases of the matter. They were: Ambrose J. Seitz and John E. Tilford, executive vice-presidents, respectively, of the Union Pacific and Louisville & Nashville; W. B. Irwin, assistant to vice-president, Great Northern; Starr Thomas, general attorney, Atchison, Topeka & Santa Fe; M. I. Goldsmith, mail and express traffic manager, Southern Pacific; G. N. Page, J. W. Rada and L. M. Whitehead, managers of mail, baggage and express traffic of the Northern Pacific, Illinois Central and Chicago, Burlington & Quincy, respectively; and Walter J. Treloar and H. E. Mack, Jr., managers of mail and express traffic, respectively, for the New York Central, and for the Missouri Pacific and Texas & Pacific.

Plan $50 Million Project on Katy Property at Houston

An agreement has been reached whereby the Missouri-Kansas-Texas is to sell its downtown freight and passenger terminal properties at Houston, Tex., to the Katy Park Industrial Development Corporation (not affiliated with the railroad), which in turn plans to erect a 10-story warehouse, a 25-story office building and other facilities, at an estimated total expenditure of $50,000,000. The proposal would involve removal of the Katy freight yards to the city limits at Eureka to make way for the warehouse, and utilization of the ground floor of the new office building as a passenger station.

The Katy, at present, has two main lines serving its industrial property at two different levels, and it is contemplated that the line which now passes through its yard and enters the Katy passenger station under the Main Street viaduct will continue to serve the new passenger station. Access to trains would be by escalator from the second ground floor, which is to contain the concourse, ticket offices, waiting rooms and many shops and offices. The latter floor would be reached via gentle ramps from the third ground floor which is to be level with Main Street viaduct and have the main entrances to the building.

The warehouse, it is said, would be the "world's largest" such multiple-story building, being 2,000 ft. long, 200 ft. wide and containing in excess of 3,000,000 sq. ft. of usable floor area. The ground floor is to be served by the Katy's main line, and it is planned that entire trains can be spotted along the south side of the industrial building and unloaded in a matter of minutes by the newest of mechanical devices. Truck loading dock facilities are planned for both the third floor level and first ground floor.

Raymond J. Morfa, Katy board chairman, said the road's research and development department has worked closely with the sponsors of the project for many months. He added: "I know of no

single industrial development project, not government sponsored, of such magnitude anywhere. That such a conception can be brought to reality, can be made profitable and beneficial under private enterprise, is a splendid tribute to any form of government. . . . Floor plans and other details will be made available in Katy traffic offices throughout the country, and our representatives will work actively in bringing tenants to this project."

The Katy Park Industrial Development Corporation is a subsidiary of the National Industries Corporation of Dallas, Tex., builders of a number of industrial projects in Dallas in recent years. Several of the largest insurance companies of the country, it is said, will participate in the permanent financing of the project. Its backers are hopeful that the entire development can be completed within four years.

Long Island Asks Authority To Increase Passenger Fares

Citing the urgent need for additional income, the trustees of the Long Island have asked the New York State Public Service Commission for permission to increase basic one-way passenger fares in coaches and parlor cars by 16-2/3 per cent or from 3 to approximately 3.5 cents per mile in coaches and from 4 to approximately 4.66 cents per mile in parlor cars. In a petition filed with the commission, the trustees, David E. Smucker and Hunter L. Delatour, said that such increases are the only source of an immediate and substantial addition to the railroad's revenues. An immediate hearing is requested, and authorization is asked to make the increases effective at the earliest possible date, upon one day's notice.

Delays Action on R.E.A. Antitrust Case Petition

Pending action of the court on the Railway Express Agency's answer to the antitrust complaint filed against it by the Department of Justice, the Interstate Commerce Commission has "held in abeyance" its own action on a petition whereby the Express Agency seeks a specific determination to the effect that the commission's approval of pooling arrangements for the handling of express traffic under the Express Operating Agreement have included approval of that agreement's so-called "exclusive provisions." The antitrust complaint was filed in the United States District Court for the District of Delaware, and the R.E.A. answer included a motion asking the court to dismiss the complaint without prejudice to the right of the government to file the same or an amended complaint after the conclusion of "appropriate" proceedings before the I.C.C.; or, in the alternative, to stay the court proceedings until the conclusion of proceedings before the commission.

It is the court's determination of this motion that the commission has decided to await before acting on the R.E.A. petition. The "exclusive provisions" of the express agreement, for which R.E.A. seeks specific commission approval, are those which constitute R.E.A. as the exclusive agent for each contracting railroad in the conduct of express business, and under which each road agrees not to transport competing traffic on passenger, mail or express trains. The pending petition advised the commission that the antitrust complaint seemed to be directed against the "exclusive provisions" and the definition of "express transportation business" to be carried on under the agreement. (See *Railway Age* of September 25, 1948, page 59, and April 9, 1949, page 65.)

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The agreement, which affects approximately 45,000 R. E. A. employees in all parts of the country, closely follows the recommendations of a presidential emergency board, as outlined in *Railway Age* of May 14, page 62. It does not provide any special benefits for the employees in New York who were on strike from March 8 to April 14.

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As summarized by Mr. Clark, the complaint charged that the N.P., a land-grant road, has sold and leased a substantial part of its lands subject to so-called "traffic clauses," which require the buyers and lessees to use the N.P. "exclusively" for their shipments of commodities and products coming from the lands, and for their inbound shipments. It was charged further that the "traffic clauses" also require that products manufactured in whole or in part on the lands involved be sold to vendees who are willing to ship their products over N.P. lines. "Cancellation of all outstanding traffic-clause contracts and a perpetual injunction against the making of any similar contracts in the future" is sought by the complaint, the Justice Department's announcement said.

It also presented comment on the complaint which had been made by H. A. Bergson, assistant attorney general in charge of the Anti-Trust Division. "These contracts containing traffic clauses," Mr. Bergson said, "have secured for Northern Pacific a substantial monopoly in the transportation of commodities and products coming from, produced on, and shipped to lands formerly owned and still owned by the Northern Pacific. Competing railroads, motor truck lines, and steamship lines have been deprived of an opportunity to compete in an open market for the business of transporting such commodities. Grantees of Northern Pacific lands have been deprived of a free choice both of the means of transportation to be used as well as the markets in which commodities produced on such land shall be sold. Northern Pacific has secured for itself monopoly control over the sale or other disposition of substantial quantities of commodities which it does not own."

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The reports were made by Examiner Charles W. Berry, who would have the commission condemn as unlawful some of the South Buffalo practices under investigation; and by Examiner George J. Hall who recommended findings to the effect that, generally speaking, the practices which were criticized by the commission's field investigators have since been corrected or discontinued. Thus four proposed reports have now been made in this investigation, docketed as Ex Parte No. 128, which was instituted by the commission upon its own motion on November 7, 1938.

The earlier reports, after which rehearings were granted, were made in 1942 by Examiners William J. Koebel and Ernest A. Burslem jointly (see *Railway Age* of April 18, 1942, page 796); and in 1946 by Examiner Burslem (see *Railway Age* of July 27, 1946, page 150). Meanwhile, the South Buffalo was also involved in court proceedings which culminated in the United States Supreme Court's 5-to-4 decision holding that the road did not violate the Interstate Commerce Act's commodities clause by transporting commodities manufactured by Bethlehem (see *Railway Age* of May 1, 1948, page 52).

The present Berry report would have the commission find that car spotting services performed by the South Buffalo at the Bethlehem plant, without charges in addition to the line-haul rates, are unlawful to the extent that they are

ANNUAL REPORTS

Railroad		Operating Revenues	Operating Expenses	Fixed Charges	Net Income	Current Assets*	Current Liabilities*	Long Term Debt*
Alabama Great Southern	1948	$18,334,532	$13,312,685	$363,998	$3,401,929	$13,149,634	$4,842,715	$11,767,545
	1947	16,715,178	12,815,937	372,410	2,332,281	11,040,451	4,049,630	12,495,714
Atlantic Coast Line	1948	136,336,690	118,287,514					
	1947	128,429,922	112,461,791	4,050,995	6,003,953	45,436,055	22,464,407	95,890,654
Belt of Chicago	1948	11,837,830	7,757,825	1,618,359	186,824	4,412,952	2,767,424	None
	1947	10,193,921	6,905,932	1,649,908	184,147	3,591,901	1,991,886	None
Bessemer & Lake Erie#	1948	26,415,941	16,307,859	430,616	7,188,051	17,481,845	8,791,415	14,478,000
	1947	22,891,463	13,150,818	466,245	6,980,577	15,734,762	8,272,068	16,043,000
Central of Georgia†	1948	37,805,609	32,878,687	2,921,053	1,021,030d	10,450,272	5,665,062	29,733,283
	1947	32,378,264	29,865,257	5,154,358	5,064,438d	21,372,535	6,783,646	60,066,865
Central of New Jersey	1948	42,736,241	38,223,163	2,476,219	8,488,575d	16,302,717	8,604,887	50,297,986
	1947	37,565,888	34,165,978	2,455,286	3,148,514d	16,550,244	9,428,601	48,923,585
Chicago, St. Paul, Minneapolis & Omaha	1948	34,238,852	28,298,814	2,449,664	354,965d	9,103,864	6,256,044	54,797,742
	1947	31,379,285	25,891,136	2,404,325	676,860d	9,995,266	6,242,031	53,495,903
Cincinnati, New Orleans & Texas Pacific	1948	40,272,864	26,239,267	1,917,650	6,561,482	26,555,731	11,481,444	4,228,000
	1947	34,854,624	23,413,171	1,882,667	4,386,674	22,216,632	9,739,956	5,048,000
Colorado & Southern	1948	13,752,370	11,023,446	610,843	776,683	7,910,668	4,001,711	41,236,598
	1947	12,767,159	10,174,191	613,042	383,207	6,791,259	3,734,215	41,717,205
Duluth, South Shore & Atlantic	1948	6,327,049	5,123,097	900,942	333,154d	4,956,619	765,030	23,630,119
	1947	5,517,693	4,443,737	900,070	335,476d	4,684,728	746,041	23,302,192
Florida East Coast	1948	28,653,199	23,897,809	2,676,575	2,404,135d	25,644,097	585,192	58,106,471
	1947	27,054,333	23,683,283	2,683,798	2,674,216d	25,619,731	1,154,279	58,577,714
Georgia Southern & Florida	1948	7,211,017	5,325,305	320,769	210,732	2,939,404	1,463,536	5,881,229
	1947	6,201,458	4,807,573	320,509	45,070	2,536,410	1,435,547	5,772,974
International-Great Northern	1948	33,757,359	27,672,878	2,845,990	176,938	14,933,328	7,192,498	55,002,270
	1947	30,147,754	25,342,858	2,781,271	1,206,609d	14,672,795	6,682,682	52,428,779

*On December 31
#Including leased lines
†Reorganized effective July 1, 1948
dDeficit

at prices yielding from 1.5 to 2.95 per cent, according to maturity.

Erie.—To assume liability for $3,450,000 of equipment trust certificates to finance in part the acquisition of 36 Diesel-electric locomotives (see *Railway Age* of May 7, page 66). The certificates will be dated May 15 and will mature in 10 annual installments of $345,000 each, beginning May 15, 1950. The commission's report approved a selling price of 99.0599 with a 2 per cent interest rate—the bid of the First Boston Corporation and 2 associates, which will make the average annual interest cost approximately 2.2 per cent. The certificates were reoffered to the public at prices yielding from 2.05 to 2.35 per cent according to maturity.

Pennsylvania.—To assume liability for $10,425,000 of equipment trust certificates to finance in part the acquisition of 33 Diesel-electric locomotives, 43 passenger-train cars, and 500 gondola cars (see *Railway Age* of May 14, page 70). The certificates will be dated May 1 and will mature in 15 annual installments of $695,000 each, beginning May 1, 1950. The commission's report approved a selling price of 99.77566 with a 2½ per cent interest rate—the bid of Harriman Ripley & Co. and Lehman Brothers and 5 associates, which will make the average annual interest cost approximately 2.55 per cent. The certificates were reoffered to the public at prices yielding from 1.45 to 2.7 per cent according to maturity.

Washington Terminal.—To issue and sell $1,600,000 of series B first mortgage bonds to reimburse its treasury in part for expenditures made for additions, betterments and improvements. This company's proprietors, the Philadelphia, Baltimore & Washington (subsidiary of the Pennsylvania), and the Baltimore & Ohio, will guarantee these bonds, which will be secured by the W.T.'s first mortgage dated February 1, 1945. The bonds will be dated May 1, 1949, and will mature May 1, 1974. The commission's report approved a selling price of 98.051 with a 2½ per cent interest rate—the bid of Adams & Peck, which will make the average annual cost approximately 2.61 per cent. For sinking fund purposes, redemption prices will range from 102⅜ and accrued interest on May 1, 1951, to par and accrued interest on and after May 1, 1970. The bonds will also be redeemable at the option of the W.T. as a whole, or in part, in amounts not less than $100,000, on not less than 45 days' notice, at prices ranging from 105 and accrued interest on May 1, 1950, to par and accrued interest from November 1, 1969, to maturity.

Applications have been filed with the I.C.C. by:

Helena & Northwestern.—To issue 1,000 shares of common stock, par value $100 per share; 1,000 shares of preferred stock, par value $100 per share; and a per cent promissory note for $200,000. Total of securities to be issued is $400,000. Of this, $300,000 would be used to acquire a 54-mi. line of the Missouri & Arkansas extending from Helena, Ark. to Cotton Plant, together with 6 miles of sidings (see *Railway Age* of October 23, 1948, page 61); $75,500 for rehabilitation purposes; $12,000 for equipment; and $12,500 for working capital.

Dividends Declared

Boston & Albany.—$2.00, payable June 30 to holders of record May 31.

Chicago, South Shore & South Bend.—25¢, payable June 15 to holders of record June 6.

Dayton & Michigan.—8% preferred, $1.00, quarterly, payable July 5 to holders of record June 15.

Erie.—Common, 50¢, payable June 20 to holders of record May 31.

Kansas City Southern.—common, $1.00, payable June 15 to holders of record May 31; 4% preferred, $1.00, quarterly, payable July 15 to holders of record June 30.

Massawippi Valley.—$3.00, semiannual, payable August 1 to holders of record July 30.

New York & Harlem.—$2.00, semiannual, payable July 1 to holders of record June 10.

Pittsburgh, Fort Wayne & Chicago.—common, $1.75, quarterly; 7% preferred, $1.75, quarterly; payable July 1 and July 5, respectively, to holders of record June 10.

Reading.—4% 2nd preferred, 50¢, quarterly, payable July 14 to holders of record June 23.

Texas & Pacific.—common, $1.00; 5% non-cumulative preferred, $1.25, quarterly; both payable June 30 to holders of record June 16.

Union Pacific.—$1.25, quarterly, payable July 1 to holders of record June 6.

Ware River.—$3.50, semiannual, payable July 16 to holders of record June 16.

Wheeling & Lake Erie.—75¢, quarterly, extra, 68¾¢; both payable July 1 to holders of record June 15.

Average Prices Stocks & Bonds

	May 31	Last week	Last year
Average price of 20 representative railway stocks	37.58	38.59	54.62
Average price of 20 representative railway bonds	84.75	85.73	89.94

RAILWAY OFFICERS

FINANCIAL, LEGAL & ACCOUNTING

Theodore K. Warner, Jr., assistant general counsel of the Pennsylvania, at Philadelphia, Pa., has been promoted to general attorney. Born in Philadelphia in

News Department continued on next left-hand page

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The present Berry report would have the commission find that car spotting services performed by the South Buffalo at the Bethlehem plant, without charges in addition to the line-haul rates, are unlawful to the extent that they are

performed beyond tracks which the examiner found to be "reasonably convenient" points for receipt and delivery of freight at the plant. Other conclusions of this report are that the South Buffalo has failed since 1938 to collect the applicable demurrage charges on cars delivered to the Bethlehem plant; and that the road's per diem records "were poorly made and kept, and were inaccurate, and that its connections failed either to make correct records or to adequately check the interchange reports." Trunk lines connecting with the South Buffalo are also respondents in the proceeding.

Mr. Berry also found that "unlawful" rebating in violation of the Elkins Act has resulted from a 1922 transaction whereby the South Buffalo purchased about 75.5 miles of track in the Lackawanna plant from Bethlehem. The purchase contract provided for lease by the South Buffalo of the land on which the tracks are laid, ownership of which was retained by Bethlehem, and for the payment by the railroad of a proportion of taxes and assessments, as well as rent, on such land. The examiner called this contract "a radical departure from the fundamental concepts of sound business and responsible common carrier management."

"Under it," he continued, "the South Buffalo paid $851,608.93 to the steel company for the privilege of owning, maintaining, and furnishing free to the steel company plant facilities previously owned and maintained by the industry and which were designed, intended, and were and are now used solely for the benefit of the steel company. The South Buffalo derived no benefit from the same but subjugated its economic interests to those of the steel company. The arrangement was and is a continuing outright gratuity and concession."

Mr. Berry conceded that the ownership and furnishing of such tracks is a matter "justifiable in another forum." He explained that he had nevertheless considered the matter at some length "in order to avoid any misconception that by silence with respect thereto we inferentially or otherwise sanction or condone the unlawful rebate, concession, or discrimination."

In recommending a finding to the effect that the South Buffalo has "corrected or discontinued" the practices criticized, Examiner Hall said that this was not to be construed as meaning that the road "is not now engaged in some practices which ought to be corrected." He explained his approach as one which recognized that the record in the case "was made chiefly during the period of the war when conditions were abnormal and not representative of present-day conditions." Specific findings with respect to the latter could not be made on the record, Mr. Hall continued. He went on to note that the South Buffalo is now a party to the Curlett tariff covering spotting services.

The road, he said in closing, "will be expected to at once make a careful study of its various operations and practices within the Lackawanna plant, giving particular attention to the question of whether the cost of owning and maintaining tracks on which the hot metal and slag traffic are handled may properly be charged to its common carrier account, and make whatever changes are necessary to bring them into conformity with the provisions of the Interstate Commerce Act and those of the Curlett tariff."

ADMINISTRATION "100 PER CENT" FOR ST. LAWRENCE SEAWAY

"The administration is back of the St. Lawrence seaway one hundred per cent —as I am—and will make every possible effort to secure its approval," United States Secretary of Commerce Charles Sawyer told a group of American and Canadian magazine editors and newspaper reporters in a press conference at Toronto, Ont., on May 30, just prior to his participation in ceremonies attending the opening of Canada's second international trade fair.

While stating that he had no idea what Congress would do about the seaway proposal, Mr. Sawyer emphasized that the Truman administration's efforts to obtain Congressional approval "would not be relaxed."

Up to this time, he also said, there has been no disposition on the part of the administration to separate the power and navigation features of the project, or to approve a power project alone if Congress proves unwilling to accept the navigation end of the proposal.

Canada Stages Second International Trade Fair

Canada's second annual international trade fair opened at Toronto, Ont., on May 30, with some 600 exhibitors from all parts of the world displaying both industrial and consumer goods ranging all the way from abrasives to welding equipment. Among the exhibitors were a number of American and Canadian firms specializing in building materials; shop, construction and materials handling machinery, and electrical equipment.

The Canadian fair, which lasts through June 10, is presently the only one of its kind in the western hemisphere, but a number of cities in the United States are considering sponsoring similar exhibits in 1950 or subsequent years.

C.P.R.-C.N.R. File Submissions With Royal Commission

The Canadian Pacific, on May 27, filed with Canada's Royal Commission on Transportation a 42-page outline submission, documented to show that it is "in the best interest of Canada that the Canadian Pacific continue to function as a privately owned system with adequate earnings to enable it to continue to supply efficient transportation services at the lowest possible cost."

Another outline was filed by the Canadian National early this week.

While admitting the necessity of regulation, the Canadian Pacific argued that regulation should neither be sought for its own sake nor carried to the point of oppression. "If regulation is carried too far, and above all, if the problem is allowed to become one hedged around with political controversy and subject to political solutions, private enterprise cannot perform its function and must inevitably give way to socialization," the brief set forth. Regulation, the C.P.R. contends, should be performed by a tribunal administrative in character but "free from the stultifying effect of having its decisions subject to review and appeal by a political tribunal." It is extremely important, the C.P.R. says, that neither parliament nor the governor-in-council should provide the arenas in which questions primarily for the administrative tribunal are argued and disposed of.

The company reiterates its conviction that the system of rate regulation under the Railway Act has both stood the test of time and enabled a remarkably high degree of national prosperity to be obtained. "The machinery provided by the Act, as it has been administered and interpreted by the Board [of Transport Commissioners] subject to appeal on matters of law and jurisdiction to the Supreme Court, has provided a rate structure which will move the maximum volume of traffic of all kinds," the C.P.R. contends, "and the railways themselves have at least an equal interest with the shipping public in maintaining the lowest possible level of rates. It is not, however, desirable that the railways should perform uneconomical transportation services merely to create artificial or other growth in areas where geographical disadvantages inhibit economical development of certain industries." No system of rate-making, the C.P.R. believes, should be adopted which contemplates the principle of transportation subsidies because these tend to encourage uneconomic use of transportation services.

The brief states that the "Canadian Pacific points with satisfaction to the role it has filled in the development of the country."

A chart is attached to illustrate that the average revenue received by the C.P.R. for hauling one ton of freight one mile was 1.2 cents in 1885 and 1.13 cents in 1948. In terms of real purchasing power the cost to the shipper today is less than half that of 1885. "This reduction in rail transportation costs," the argument declares, "was achieved not only as the result of increased volume but also as a result of more efficient use of plant and equipment. The increase in efficiency has been possible because heavy capital expenditures have been made by the company." Other charts indicate that gross earnings of the C.P.R. are taking a decreasing proportion of the

national income and that the ratio of net to gross earnings has been diminished drastically.

The solution of the railway problem, as the C.P.R. sees it, rests on insuring that the railways of Canada be made financially sound and be able to provide adequate and modern railway services. Railways, at least those privately owned, must be able to attract the necessary capital in order to keep pace with the need of expansion and modernization of their services, and for the improvements required to ensure that the products of industry may find their markets at home and abroad.

The C.P.R. will file a detailed brief and introduce oral evidence at sittings of the commission which are expected to commence in Ottawa, Ont., in September.

The Canadian National, in its submissions, will ask the commission to make recommendations directed toward placing the railways in a better position to serve in the development of the country and its commerce.

In the outline brief the railway's counsel say: "The Canadian National considers that its capital structure is unsatisfactory. The fixed charges are grossly excessive in relation to the earning power of the railway or when compared with the fixed charges of other major railways. In 1923 Canadian National was required to assume without mitigation the debts of its bankrupt predecessor corporations. The assumption of these heavy debts by the newly organized system is the principal underlying cause of the present excessive fixed charge burden.

"While the total capital of the Canadian National need not be reduced . . . an adjustment is required between the portion of total capital represented by interest charge debt and the portion represented by equity capital." [In its 1948 annual report, the C.N.R. showed that its fixed charges in 1948, after operating expenses, were $46,341,727; of this, $23,202,818 was interest due the public and $21,627,033 interest on government loans.].

"It must be pointed out," the railway says, "that the financial difficulties of the company do not arise in their entirety from over-capitalization but also from the operation of railway lines which can bear no fixed charges and as a result place an excessive burden on the remunerative lines. . ."

"It will be submitted," the C.N.R. also says, "that it is highly desirable that the railways should carry the traffic which they can best handle in the national interest, while leaving to other modes of transportation the fields in which they have special advantages of cost or convenience, also that an inquiry be undertaken to determine how this can be fairly accomplished."

The railway will urge the commission: (1) To determine whether all forms of transportation should be under unified control; (2) That it would be beneficial to control competing services from the standpoint of national public convenience and necessity; (3) That the railways should have a scale of rates which would secure to the railways a fair return on prudently invested capital; apportion transportation charges as equitably as possible between different sections of Canada and to various commodities; and enable the railways to perform that portion of the country's transportation which can be performed more economically by railway than by other means of transport; and (4) That the "agreed charge" provisions of the Transport Act should be amended to make the agreed charge more effective in securing to the railways traffic which they can carry more economically than competing forms of transportation.

Discussing the basis of a national transportation policy, the C.N.R. states that this must "primarily be concerned with railways because the railway is and probably will always be the major land transportation agency. Other modes of transportation have their respective advantages. The advantage which appertains to the railway is the ability to conduct land transportation in volume at an economic cost far less than by any other medium.

"The aim of a national transportation policy should be to secure the optimum advantage from each type of transportation and from a division of service between the various agencies to achieve and maintain a proper balance of cost and convenience. This is not a simple problem at best, and in Canada, with division of control of transport between federal and provincial governments and their respective regulatory bodies, it is especially difficult. The present chaotic condition has resulted in the railways being severly handicapped."

Court Holds Employee Injuries Include Occupational Diseases

Injuries for which railroad employees may sue under the Federal Employers' Liability Act and the Boiler Inspection Act include "injuries in the nature of occupational disease," the United States Supreme Court ruled in a May 31 decision. The decision, announced in an opinion by Justice Rutledge, ordered the reinstatement of a jury award of $30,000 to a Missouri Pacific fireman who based his suit on contentions that he contracted silicosis and was thus permanently disabled as a result of breathing silica dust contained in the sand used in the sanders of the locomotives on which he was firing.

The case was docketed in the Supreme Court as No. 129, William T. Urie vs. Guy A. Thompson, trustee of the Missouri Pacific. It reached there on appeal from a ruling of the Missouri Supreme Court which had set aside the verdict of the trial court. That verdict had resulted from an action based on the Boiler Inspection Act, and the Missouri Supreme Court read that act as one "aimed at promoting safety from accidental injury, as distinguished from injury due to the gradual inhalation of harmful dusts."

That same court, however, had passed on a previous suit which Mr. Urie had based on the Federal Employers' Liability Act. There it sustained a demurrer filed by the railroad with a ruling that the action could not be maintained under the liability act, which requires a showing of negligence because the railroad could not have "anticipated plaintiff's injury, and . . . therefore . . . the petition does not state facts sufficient to constitute a cause of action for negligence . . . " At the same time the court noted that one of the contentions of the suit was that the sanders did not function properly, which amounted to an allegation of breach of the Boiler Inspection Act. It went on to say that if such an allegation could be proved it would support a recovery under the Federal Employers' Liability Act without a showing of other "negligence" on the part of the railroad. Accordingly the court remanded the case to the trial court, and Mr. Urie amended his complaint to charge specifically violations of the Boiler Inspection Act.

It was on that basis that the trial resulting in the $30,000 verdict was had. And it was the railroad's appeal which brought the case before the Missouri Supreme Court for the second time. Then that court made its determination that silicosis was not among the "injuries" which the Boiler Inspection Act was designe to prevent. After a lengthy discussion of the matter and consideration of court rulings which it considered pertinent, the United States Supreme Court ruled otherwise. It could not, it said, accept the view that the "protection of employee health" was not embraced by the safety plan which Congress had in mind when it enacted the Liability and Boiler Inspection acts. And it went on to find that the injury for which recovery may be had for violation of the Boiler Inspection Act is "no narrower" than the injury for which recovery is authorized under the liability act.

"We hold," the court concluded, "that petitioner's injury is one compensable under the Boiler Inspection Act. We hold further, in the light of the trial instructions and such evidence as appears in the record before us, that the jury was justified in finding (1) that respondent breached the Boiler Inspection Act, and (2) that such breach was a proximate cause of petitioner's injury.

"We conclude that petitioner stated a valid claim for negligent injury under the Federal Employers' Liability Act on his first appeal and that petitioner stated on both appeals and proved on his second a valid claim for injury flowing from violation of the Boiler Inspection Act. The record before us reveals no error in the jury's verdict for petitioner, which was based on the second theory of the case; the damages awarded are consistent with either theory."

Justice Frankfurter filed a concurring-in-part opinion to which Justices Reed, Jackson and Burton subscribed. While

they agreed that recovery may be had under the Federal Employers' Liability Act for silicosis "where the facts sustain such a claim," they also agreed with the Missouri Supreme Court's conclusion that "occupational diseases cannot be fitted into the category of 'accidents' for which the Boiler Inspection Act devised a scheme of regulation and a basis of liability."

Justice Frankfurter said that further legislation is needed "which will effectively meet the social obligations which underlie the incidence of occupational disease." The drive for such legislation will be retarded "if encouragement is given to the thought that there are now adequate remedies for occupational diseases," he added. "The result of this decision is to secure for this petitioner the judgment which the jury awarded him. It does not secure a proper system for dealing with occupational diseases."

Bulwinkle Act Applications

Oral argument on the rate procedures agreement filed by carrier members of the Western Traffic Association will be heard by the Interstate Commerce Commission in Washington, D. C., on June 20. The commission has also announced that a hearing on the like agreement proposed by southern railroads will be held at the Henry Grady Hotel, Atlanta, Ga., on July 19 before Commissioner Rogers and Examiner Burton Fuller.

The agreements were filed for commission approval under section 5a of the Interstate Commerce Act, which was added last year by the Bulwinkle-Reed Act. The commission recently issued an order granting the Railway Labor Executives' Association leave to intervene in the western-agreement proceeding, which is docketed as Section 5a Application No. 2. The application of the southern roads is docketed as Section 5a Application No. 6.

J. M. Hall Retires from Bureau Of Locomotive Inspection

John M. Hall, director of the Bureau of Locomotive Inspection of the Interstate Commerce Commission since August, 1935, retired from that position on May 31. He had completed more than 37 years of government service, all of which was with the bureau.

Mr. Hall was born May 20, 1879, in Kent county, Maryland, and attended public schools in Wilmington, Del. He also took a correspondence-school course in general mechanical engineering. His first employment was with a Wilmington newspaper for about four years, and then in a machine shop. In 1898, Mr. Hall enlisted in the Army and served as a private during the Spanish-American War. When he returned from that service, he entered the employ of the Pennsylvania in its signal department; and later he became, in turn, locomotive fireman and locomotive engineer on that road.

Mr. Hall joined the staff of the Bureau of Locomotive Inspection on October 9, 1911, his first position with the bureau having been that of district inspector with headquarters at Fort Worth, Tex. He continued in that capacity, although serving in other districts, until July, 1918, when he became assistant chief inspector of the bureau by appointment of the late President Wilson. As noted above, he became head of the bureau in August, 1935, when the late President Roosevelt appointed him

John M. Hall

to the position of chief inspector. The title was subsequently changed to director.

Mr. Hall is a member of the Brotherhood of Locomotive Firemen & Enginemen, American Society of Mechanical Engineers, Master Boiler Makers Association, Locomotive Maintenance Officers' Association, and Railway Fuel & Traveling Engineers' Association. He was guest of honor this week at a testimonial dinner sponsored by his friends in the railroad and railroad supply industries. The dinner was held June 2 at the Emerson Hotel, Baltimore, Md.

Lets Unions, Security Owners, T.A.A. into Reparations Cases

The Interstate Commerce Commission has authorized the Railway Labor Executives' Association, the Brotherhood of Railroad Trainmen, the Railroad Security Owners' Association, and the Transportation Association of America to intervene in the 17 pending proceedings which involve the federal government's claims for reparations on railroad rates paid for its shipments of various commodities during World War II. The interventions were opposed by the Department of Justice, the petitions of the foregoing organizations having indicated that they would support the railroad position in the proceedings. The commission had previously authorized the Brotherhood of Locomotive Engineers to intervene.

Another commission order in the proceedings requires that copies of petitions for intervention and other documents or notices be served hereafter on the government through Assistant Attorney General H. A. Bergson. In that role, Mr. Bergson replaces David O. Mathews, former special assistant to the attorney general, who has become general counsel of the Chicago & Eastern Illinois.

Bills in Congress

Several bills of interest to the railroads have been introduced in Congress since the latest previous listing in the *Railway Age* of April 9, page 67. Among such legislative proposals are the following:

INTRODUCED IN HOUSE OF REPRESENTATIVES

H.R.4123, to amend the Railroad Retirement Act so as to provide full annuities at half salary or wages, based on the five highest years of earnings, for individuals who shall have completed 30 years of service (Kennedy of Massachusetts).

H.R.4204 and H.R.4321 to amend the act to encourage travel in the United States (Hand of New Jersey and Beckworth of Texas).

H.R.4266, to amend the Railroad Retirement Act to make employees eligible for annuities after 40 years of service, regardless of age, and to make widows eligible for annuities, regardless of age (Clemente of New York).

H.R.4271, to authorize the Postmaster General to enter into special agreements for certain switching service by railway common carriers (Murray of Tennessee).

H.R.4282, to amend the Railroad Retirement Act to permit retirement with full annuity at age 60 after 30 years' service (Priest of Tennessee).

H.R.4334, to amend the Railroad Retirement Act to permit the payment of survivor annuities to individuals for months in which they render service for wages of less than $75 (Ford of Michigan).

H.R.4391, H.R.4398, H.R.4445 and H.R.4826, to authorize the coinage of 50-cent pieces to commemorate a century of railroad operations out of Chicago, and to commemorate the Chicago Railroad Fair of 1948-49 (Ford of Michigan, O'Brien of Illinois, Shafer of Michigan, and O'Hara of Illinois).

H.R.4443, to amend section 20b of the Interstate Commerce Act (Crosser of Ohio).

H.R.4589, to amend the Railroad Retirement Act so as to reduce from six to four the quarters of coverage required for an employee to be insured for survivor benefits (Jonas of Illinois).

H.R.4590, to amend the Railroad Retirement Act (Jonas of Illinois)

INTRODUCED IN SENATE

S.1852, to provide for refund of taxes deducted . . . from the wages of Mexican railroad workers employed in the United States under the agreement of April 29, 1943, between the United States of America and the United Mexican States (Thomas of Utah.)

S.1868, to amend the Railroad Retirement Act so as to provide full annuities at half salary or wages based on the five highest years of earnings for individuals who shall have completed 30 years of service (Thomas of Utah).

S.1917, to authorize the conversion of the Panama Canal to a sea-level waterway (Johnson of Colorado).

Suspends Proposed Increases In N. Y. Commutation Fares

The Interstate Commerce Commission has suspended tariffs whereby the Pennsylvania and Erie proposed to increase their commutation fares in the New York City area. The P.R.R. tariff, which proposed increases ranging from 6 to 30 per cent, was suspended from May 15 to and including December 14. The Erie tariff, which proposed increases of approximately 18 per cent, was suspended from June 1 to and including December 31.

Times and places for hearings on the proposals will be announced later by the commission, which has docketed the P.R.R. proceeding as I. & S. No. 5655 and the Erie case as I. & S. No. 5660.

Subsequently the commission suspended, from June 8 to January 7, 1950, the

operation of Delaware, Lackawanna & Western tariffs which also proposed to increase commutation fares in the New York area. This proceding was docketed as I.&S. No. 5663.

Freight Car Loadings

Carloading figures for the week ended May 28 were not available when this issue went to press.

Loadings of revenue freight for the week ended May 21 totaled 773,911 cars, and the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, May 21

District	1949	1948	1947
Eastern	135,487	156,291	162,735
Allegheny	164,878	187,832	193,495
Pocahontas	63,601	76,108	72,355
Southern	116,482	140,621	135,846
Northwestern	122,804	126,723	136,904
Central Western	113,276	125,454	126,627
Southwestern	57,383	66,148	62,643
Total Western Districts	293,463	318,325	326,174
Total All Roads	773,911	879,177	890,605
Commodities:			
Grain and grain products	48,404	39,433	44,656
Livestock	8,841	12,543	12,194
Coal	157,452	202,990	188,721
Coke	13,811	14,301	14,289
Forest products	40,100	46,069	45,851
Ore	76,787	76,110	79,349
Merchandise l.c.l.	92,946	107,598	119,626
Miscellaneous	335,570	380,133	385,919
May 21	773,911	879,177	890,605
May 14	771,736	846,945	888,208
May 7	768,337	880,287	884,242
April 30	785,444	891,115	882,574
April 23	769,336	851,926	893,712
Cumulative total 20 weeks	14,347,702	15,642,607	16,608,488

In Canada.—Carloadings for the week ended May 21 totaled 73,521 cars, as compared with 74,104 cars for the previous week, and 76,683 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
May 21, 1949	73,521	31,204
May 22, 1948	76,683	33,089
Cumulative totals for Canada:		
May 21, 1949	1,450,886	635,305
May 22, 1948	1,480,891	719,394

Railway Users Not Getting Fair Benefits from Progress—Crump

N. R. Crump, vice-president of the Canadian Pacific, speaking at St. John, N. B., on May 27, said his company would welcome any solution which will settle persistent allegations of territorial inequalities and discriminations in the Canadian freight rate structure, and at the same time provide for an economically sound position for the railways.

Guest speaker at a luncheon sponsored by the common council and board of trade, Mr. Crump said his company, in common with all Canadian enterprises, is faced with ever rising costs of operations due to advances in labor and material costs. "The over-all objective of passing on to the user of railway facilities his proper share of the benefits of progress has been greatly impeded by the erroneous belief of some that all cash gains belong to the employees to the exclusion of owners and users alike. It is, of course, desirable and just that a fair share of the benefits of progress should accrue to the workers in both shorter hours and better pay, but it is evident that in later years by far the greater part of our productive economies have been paid out in the form of higher wages rather than in lower rates and increased dividends," he said. Mr. Crump added that constant increases in wages and salaries not balanced by comparable increase in output per man-hour could only result in higher costs to the public.

"In our case the over-all advance in material prices since 1939 amounts to 65 per cent, while labor costs have advanced approximately 70 per cent," he said, adding that in 1948 the C.P.R. achieved the highest gross earnings in its history, while its net railway earnings were lower than any year since 1905, with a return on net investment of only 1.8 per cent. "You will agree that this condition cannot make for a sound industry," he warned.

North Shore Cuts Off 54 Trains

The Chicago, North Shore & Milwaukee, which claims to be losing $700,000 annually on its passenger traffic, was authorized by the Illinois Commerce Commission last week to drop 54 trains serving suburbs north of Chicago, effective June 5. Still pending before the commission is a petition filed by the railroad on December 16, 1948, in which it seeks permission to abandon operations on its Shore Line branch (See *Railway Age* of December 25, 1948, page 56). The North Shore reports that the new schedules will effect a yearly saving of $40,000.

A.A.R. Board Orders Vote On Refrigerator Car Rentals

Directors of the Association of American Railroads, at their regular monthly meeting in Washington, D. C., on May 27, directed that a proposal to increase mileage rates on refrigerator cars be submitted by letter ballot to A.A.R. member roads. The proposal is to raise the rates as follows: On general-purpose refrigerator cars, from 2.5 cents to 3 cents per mile; on "RB" type reefers, from 2.2 cents to 2.5 cents; and on the "LRC" type, from 2 to 3 cents.

Emergency Board Report

The emergency board which investigated a dispute between the Aliquippa & Southern and those of its employees who are represented by the Brotherhood of Railroad Trainmen recently made its report to President Truman. The dispute involved working-agreement changes proposed by both sides, and the board made recommendations which suggested modifications of some of the rules in issue while holding that others should be retained in their present form.

Meanwhile, the report characterized the dispute as one which "could, and should, have been settled between the parties without making necessary the intervention of a Presidential emergency board." Members of the board were Chairman Andrew Jackson, Leif Erickson, and Elmer T. Bell.

The Selected Income and Balance-Sheet Items table appears on page 66.

SUPPLY TRADE

E. A. Condit, president of The Rail Joint Company, New York, whose election as vice-president of **Poor & Co.,** Chicago, was reported in the **Railway Age** of April 30, was born at Hoboken, N. J., on September 17, 1880, and was graduated from Stevens Institute of Technology in 1902. He began his business career with the Rail Joint Company as a draftsman and later served as inspector of raw material and finished products and as chief inspector at the Troy mill. During the St. Louis Exposition, he installed and took charge of the company's exhibit, and in 1905 became inspector at Pittsburgh, Pa. The following year he opened a sales office at Pittsburgh, where he remained until his promotion to sales manager at New York in 1918. He became vice-president in 1926 and was elected president in 1943. Mr. Condit has also served as a director since 1929 and as vice-president of the Rail Joint Company of Canada since 1926.

The **Air Reduction Company** has established a new warehouse point in Tulsa, Okla., at the Fidelity Transfer & Storage Co., 1540 East Fifth street.

T. A. Huston, formerly manager at the Portland, Me., branch of the **Graybar Electric Company,** has been appointed Boston, Mass., district appliance sales manager and **H. J. Scully** has been appointed manager at Portland. Mr. Huston also will supervise appliance sales activities at the Providence, R. I., Worcester, Mass., and Springfield, Portland and Manchester, N. H., branches.

Fred C. Grafton, sales manager of the **Chapman Chemical Company,** Memphis, Tenn., has assumed the advertising duties formerly handled by **E. A. Behr.** Mr. Behr will devote his full time to the company's extensive research and experimental work in its field of wood preservatives and agricultural chemicals.

The **Caterpillar Tractor Company,** Peoria, Ill., has announced a realinement and expansion of its general sales department, and expansion of its advertising department, involving the follow-

ANNUAL REPORTS

Railroad		Operating Revenues	Operating Expenses	Fixed Charges	Net Income	Current Assets*	Current Liabilities*	Long Term Debt*
Alabama Great Southern	1948	$18,334,532	$13,312,685	$363,998	$3,401,929	$13,149,634	$4,842,715	$11,767,545
	1947	16,715,178	12,815,937	372,410	2,332,281	11,040,451	4,019,630	12,495,714
Atlantic Coast Line	1948	136,336,690	118,287,514					
	1947	128,429,922	112,461,791	4,050,995	6,003,953	45,436,055	22,464,407	95,890,654
Belt of Chicago	1948	11,837,830	7,757,825	1,618,359	186,824	4,412,952	2,767,424	None
	1947	10,193,921	6,905,932	1,649,908	184,147	3,591,901	1,991,886	None
Bessemer & Lake Erie#	1948	26,415,941	16,307,859	430,616	7,188,051	17,481,845	8,791,415	14,478,000
	1947	22,891,463	13,150,818	466,245	6,980,577	15,734,762	8,272,068	16,043,000
Central of Georgia†	1948	37,805,609	32,878,687	2,921,053	1,021,030d	10,450,272	5,665,062	29,733,283
	1947	32,378,264	29,865,257	5,154,358	5,064,438d	21,372,535	6,783,646	60,066,865
Central of New Jersey	1948	42,736,241	38,223,163	2,476,219	8,488,575d	16,302,717	8,604,887	50,297,986
	1947	37,565,888	34,165,978	2,455,286	3,148,514d	16,550,244	9,428,601	48,923,585
Chicago, St. Paul, Minneapolis & Omaha	1948	34,238,852	28,298,814	2,449,664	354,965d	9,103,864	6,256,044	54,797,742
	1947	31,379,285	25,891,136	2,404,325	676,860d	9,995,266	6,242,031	53,495,903
Cincinnati, New Orleans & Texas Pacific	1948	40,272,864	26,239,267	1,917,650	6,561,482	26,555,731	11,481,444	4,228,000
	1947	34,854,624	23,413,171	1,882,667	4,386,674	22,216,632	9,739,956	5,048,000
Colorado & Southern	1948	13,752,370	11,023,446	610,843	776,683	7,910,668	4,001,711	41,236,598
	1947	12,767,159	10,174,191	613,042	383,207	6,791,259	3,734,215	41,717,205
Duluth, South Shore & Atlantic	1948	5,327,049	5,123,097	900,942	333,154d	4,956,619	765,030	23,630,119
	1947	5,517,693	4,443,737	900,070	335,476d	4,684,728	746,041	23,302,192
Florida East Coast	1948	28,653,199	23,897,809	2,676,575	2,404,135d	25,644,097	585,192	58,106,471
	1947	27,054,333	23,683,283	2,683,798	2,674,216d	25,619,731	1,154,279	58,577,714
Georgia Southern & Florida	1948	7,211,017	5,325,305	320,769	210,732	2,939,404	1,463,536	5,881,229
	1947	6,201,458	4,807,573	320,509	45,070	2,536,410	1,435,547	5,772,974
International-Great Northern	1948	33,757,359	27,672,878	2,845,990	176,938	14,933,328	7,192,498	55,002,270
	1947	30,147,754	25,342,858	2,781,271	1,206,609d	14,672,795	6,682,682	52,428,779

*On December 31
#Including leased lines
†Reorganized effective July 1, 1948
dDeficit

at prices yielding from 1.5 to 2.95 per cent, according to maturity.

Erie.—To assume liability for $3,450,000 of equipment trust certificates to finance in part the acquisition of 36 Diesel-electric locomotives (see *Railway Age* of May 7, page 66). The certificates will be dated May 15 and will mature in 10 annual installments of $345,000 each, beginning May 15, 1950. The commission's report approved a selling price of 99.0599 with a 2 per cent interest rate—the bid of the First Boston Corporation and 2 associates, which will make the average annual interest cost approximately 2.2 per cent. The certificates were reoffered to the public at prices yielding from 2.05 to 2.35 per cent according to maturity.

Pennsylvania.—To assume liability for $10,425,000 of equipment trust certificates to finance in part the acquisition of 33 Diesel-electric locomotives, 43 passenger-train cars, and 500 gondola cars (see *Railway Age* of May 14, page 70). The certificates will be dated May 1 and will mature in 15 annual installments of $695,000 each, beginning May 1, 1950. The commission's report approved a selling price of 99.77566 with a 2½ per cent interest rate—the bid of Harriman Ripley & Co. and Lehman Brothers and 5 associates, which will make the average annual interest cost approximately 2.55 per cent. The certificates were reoffered to the public at prices yielding from 1.45 to 2.7 per cent according to maturity.

Washington Terminal.—To issue and sell $1,600,000 of series B first mortgage bonds to reimburse its treasury in part for expenditures made for additions, betterments and improvements. This company's proprietors, the Philadelphia, Baltimore & Washington (subsidiary of the Pennsylvania), and the Baltimore & Ohio, will guarantee these bonds, which will be secured by the W.T.'s first mortgage dated February 1, 1945. The bonds will be dated May 1, 1949, and will mature May 1, 1974. The commission's report approved a selling price of 98.051 with a 2½ per cent interest rate—the bid of Adams & Peck, which will make the average annual cost approximately 2.61 per cent. For sinking fund purposes, redemption prices will range from 102⅜ and accrued interest on May 1, 1951, to par and accrued interest on and after May 1, 1970. The bonds will also be redeemable at the option of the W.T. as a whole, or in part, in amounts not less than $100,000, on not less than 45 days' notice, at prices ranging from 105 and accrued interest on May 1, 1950, to par and accrued interest from November 1, 1969, to maturity.

Applications have been filed with the I.C.C. by:

Helena & Northwestern.—To issue 1,000 shares of common stock, par value $100 per share; 1,000 shares of preferred stock, par value $100 per share; and a per cent promissory note for $200,000. Total of securities to be issued is $400,000. Of this, $300,000 would be used to acquire a 54-mi. line of the Missouri & Arkansas extending from Helena, Ark. to Cotton Plant, together with 6 miles of sidings (see *Railway Age* of October 23, 1948, page 61); $75,500 for rehabilitation purposes; $12,000 for equipment; and $12,500 for working capital.

Dividends Declared

Boston & Albany.—$2.00, payable June 30 to holders of record May 31.

Chicago, South Shore & South Bend.—25¢, payable June 15 to holders of record June 6.

Dayton & Michigan.—8% preferred, $1.00, quarterly, payable July 5 to holders of record June 15.

Erie.—Common, 50¢, payable June 20 to holders of record May 31.

Kansas City Southern.—common, $1.00, payable June 15 to holders of record May 31; 4% preferred, $1.00, quarterly, payable July 15 to holders of record June 30.

Massawippi Valley.—$3.00, semiannual, payable August 1 to holders of record July 30.

New York & Harlem.—$2.00, semiannual, payable July 1 to holders of record June 10.

Pittsburgh, Fort Wayne & Chicago.—common, $1.75, quarterly; 7% preferred, $1.75, quarterly; payable July 1 and July 5, respectively, to holders of record June 10.

Reading.—4% 2nd preferred, 50¢, quarterly, payable July 14 to holders of record June 23.

Texas & Pacific.—common, $1.00; 5% non-cumulative preferred, $1.25, quarterly; both payable June 30 to holders of record June 16.

Union Pacific.—$1.25, quarterly, payable July 1 to holders of record June 6.

Ware River.—$3.50, semiannual, payable July 16 to holders of record June 16.

Wheeling & Lake Erie.—75¢, quarterly, extra, 68¾¢; both payable July 1 to holders of record June 15.

Average Prices Stocks & Bonds

	May 31	Last week	Last year
Average price of 20 representative railway stocks	37.58	38.59	54.62
Average price of 20 representative railway bonds	84.75	85.73	89.91

RAILWAY OFFICERS

FINANCIAL, LEGAL & ACCOUNTING

Theodore K. Warner, Jr., assistant general counsel of the Pennsylvania, at Philadelphia, Pa., has been promoted to general attorney. Born in Philadelphia in

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operation of Delaware, Lackawanna & Western tariffs which also proposed to increase commutation fares in the New York area. This proceding was docketed as I.&S. No. 5663.

Freight Car Loadings

Carloading figures for the week ended May 28 were not available when this issue went to press.

Loadings of revenue freight for the week ended May 21 totaled 773,911 cars, and the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, May 21

District	1949	1948	1947
Eastern	135,487	156,291	162,735
Allegheny	164,878	187,832	193,495
Pocahontas	63,601	76,108	72,355
Southern	116,482	140,621	135,846
Northwestern	122,804	126,723	136,904
Central Western	113,276	125,454	126,627
Southwestern	57,383	66,148	62,643
Total Western Districts	293,463	318,325	326,174
Total All Roads	773,911	879,177	890,605
Commodities:			
Grain and grain products	48,404	39,433	44,656
Livestock	8,841	12,543	12,194
Coal	157,452	202,990	188,721
Coke	13,811	14,301	14,289
Forest products	40,100	46,069	45,851
Ore	76,787	76,110	79,349
Merchandise l.c.l.	92,946	107,598	119,626
Miscellaneous	335,570	380,133	385,919
May 21	773,911	879,177	890,605
May 14	771,736	846,945	888,208
May 7	768,337	880,287	884,242
April 30	785,444	891,115	882,574
April 23	769,336	851,926	893,712
Cumulative total 20 weeks	14,347,702	15,642,607	16,608,488

In Canada.—Carloadings for the week ended May 21 totaled 73,521 cars, as compared with 74,104 cars for the previous week, and 76,683 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
May 21, 1949	73,521	31,204
May 22, 1948	76,683	33,089
Cumulative totals for Canada:		
May 21, 1949	1,450,886	635,305
May 22, 1948	1,480,891	719,394

Railway Users Not Getting Fair Benefits from Progress—Crump

N. R. Crump, vice-president of the Canadian Pacific, speaking at St. John, N. B., on May 27, said his company would welcome any solution which will settle persistent allegations of territorial inequalities and discriminations in the Canadian freight rate structure, and at the same time provide for an economically sound position for the railways.

Guest speaker at a luncheon sponsored by the common council and board of trade, Mr. Crump said his company, in common with all Canadian enterprises, is faced with ever rising costs of operations due to advances in labor and material costs. "The over-all objective of passing on to the user of railway facilities his proper share of the benefits of progress has been greatly impeded by the erroneous belief of some that all cash gains belong to the employees to the exclusion of owners and users alike. It is, of course, desirable and just that a fair share of the benefits of progress should accrue to the workers in both shorter hours and better pay, but it is evident that in later years by far the greater part of our productive economies have been paid out in the form of higher wages rather than in lower rates and increased dividends," he said. Mr. Crump added that constant increases in wages and salaries not balanced by comparable increase in output per man-hour could only result in higher costs to the public.

"In our case the over-all advance in material prices since 1939 amounts to 65 per cent, while labor costs have advanced approximately 70 per cent," he said, adding that in 1948 the C.P.R. achieved the highest gross earnings in its history, while its net railway earnings were lower than any year since 1905, with a return on net investment of only 1.8 per cent. "You will agree that this condition cannot make for a sound industry," he warned.

North Shore Cuts Off 54 Trains

The Chicago, North Shore & Milwaukee, which claims to be losing $700,000 annually on its passenger traffic, was authorized by the Illinois Commerce Commission last week to drop 54 trains serving suburbs north of Chicago, effective June 5. Still pending before the commission is a petition filed by the railroad on December 16, 1948, in which it seeks permission to abandon operations on its Shore Line branch (See *Railway Age* of December 25, 1948, page 56). The North Shore reports that the new schedules will effect a yearly saving of $40,000.

A.A.R. Board Orders Vote On Refrigerator Car Rentals

Directors of the Association of American Railroads, at their regular monthly meeting in Washington, D. C., on May 27, directed that a proposal to increase mileage rates on refrigerator cars be submitted by letter ballot to A.A.R. member roads. The proposal is to raise the rates as follows: On general-purpose refrigerator cars, from 2.5 cents to 3 cents per mile; on "RB" type reefers, from 2.2 cents to 2.5 cents; and on the "LRC" type, from 2 to 3 cents.

Emergency Board Report

The emergency board which investigated a dispute between the Aliquippa & Southern and those of its employees who are represented by the Brotherhood of Railroad Trainmen recently made its report to President Truman. The dispute involved working-agreement changes proposed by both sides, and the board made recommendations which suggested modifications of some of the rules in issue while holding that others should be retained in their present form.

Meanwhile, the report characterized the dispute as one which "could, and should, have been settled between the parties without making necessary the intervention of a Presidential emergency board." Members of the board were Chairman Andrew Jackson, Leif Erickson, and Elmer T. Bell.

The Selected Income and Balance-Sheet Items table appears on page 66.

SUPPLY TRADE

E. A. Condit, president of The Rail Joint Company, New York, whose election as vice-president of **Poor & Co.,** Chicago, was reported in the **Railway Age** of April 30, was born at Hoboken, N. J., on September 17, 1880, and was graduated from Stevens Institute of Technology in 1902. He began his business career with the Rail Joint Company as a draftsman and later served as inspector of raw material and finished products and as chief inspector at the Troy mill. During the St. Louis Exposition, he installed and took charge of the company's exhibit, and in 1905 became inspector at Pittsburgh, Pa. The following year he opened a sales office at Pittsburgh, where he remained until his promotion to sales manager at New York in 1918. He became vice-president in 1926 and was elected president in 1943. Mr. Condit has also served as a director since 1929 and as vice-president of the Rail Joint Company of Canada since 1926.

The **Air Reduction Company** has established a new warehouse point in Tulsa, Okla., at the Fidelity Transfer & Storage Co., 1540 East Fifth street.

T. A. Huston, formerly manager at the Portland, Me., branch of the **Graybar Electric Company,** has been appointed Boston, Mass., district appliance sales manager and **H. J. Scully** has been appointed manager at Portland. Mr. Huston also will supervise appliance sales activities at the Providence, R. I., Worcester, Mass., and Springfield, Portland and Manchester, N. H., branches.

Fred C. Grafton, sales manager of the **Chapman Chemical Company,** Memphis, Tenn., has assumed the advertising duties formerly handled by **E. A. Behr.** Mr. Behr will devote his full time to the company's extensive research and experimental work in its field of wood preservatives and agricultural chemicals.

The **Caterpillar Tractor Company,** Peoria, Ill., has announced a realinement and expansion of its general sales department, and expansion of its advertising department, involving the follow-

ing changes: **H. H. Howard**, general sales manager, as director of sales; **J. J. Valentine**, assistant general sales manager, and **J. H. Mohler**, manager, sales training division, as assistant sales directors; **K. F. Ames**, assistant manager, Central sales division, as successor to Mr. Mohler; **C. K. McClelland**, district representative, Central division, as assistant Eastern division sales manager, succeeding **W. N. Foster**, appointed manager of the new sales engineering division; **L. J. Deyo**, assistant to assistant general sales manager, as head of the market research group; **J. M. Abbey**, district representative, Central division, as successor to Mr. Ames; **George E. Wennerlyn**, as assistant to advertising manager, and **Burt Powell**, manager of publicity and sales publications divisions, as assistant advertising manager.

Tolbott G. Shipley, acting district manager of the **American Car & Foundry Co.'s** St. Louis (Mo.) car plant, has been appointed district manager of the plant.

The **Automatic Transportation Company**, Chicago, has established a factory branch sales office at 347 Madison avenue, New York, and a service station and parts depot at 1749 York avenue in that city. **Philip F. Whiting** will direct both New York operations as eastern district manager.

H. M. Dudley, vice-president of the **Pullman-Standard Car Manufacturing Company**, Chicago, has been elected also vice-president of **Pullman, Incorporated**, in charge of finance and accounting, succeeding **Louis S. Taylor**, who has retired as executive vice-president.

The **Chicago Packing Corporation**, Chicago, moved, on June 1, to new quarters at 332 South Michigan avenue in that city.

OVERSEAS

Israeli Engineer to Train Here; Equipment May Also Be Bought

With a view to eventual rehabilitation of the country's railroads, the government of Israel is considering the possibility of sending a civil engineer to this country for approximately a year's practical work in railway construction, and of buying some American railway equipment.

According to the American Economic Committee for Palestine, 250 West 57th street, New York 19, the Israeli government is planning construction of a new railway running along the Mediterranean coast and thence south through the Negev desert area. At present, the Economic Committee states, there are no engineers in Israel with the necessary knowledge of railway construction. Consequently, it has been decided to send a selected man to the United States for training in all phases of construction, especially in sandy or desert terrain, from the actual laying of track to complete administration of an entire project. His salary and expenses while here will be paid by the Israeli government.

Israel's railroad rehabilitation program is also expected to involve eventual purchase of a considerable quantity of railroad equipment and supplies of many different types. The country's present railroads are described as "a pre-World War I model and badly worn down." Although built originally with European rather than American equipment, it is understood that the Israeli government wants to develop as many of its projects as possible in accordance with the latest American designs.

ORGANIZATIONS

The **Trans-Missouri-Kansas Shippers Board** will hold its eighty-third regular meeting on June 14 and 15, at Hotel Lassen in Wichita, Kan.

The 79th regular meeting of the **Pacific Coast Transportation Advisory Board** will be held on June 15 and 16 at the Elks Club, 607 South Park View street, Los Angeles, Cal.

The annual stag outing of the **Metropolitan Maintenance of Way Club** will be held on June 16, at the Out O'Bounds Aero & Golf Club, Suffern, N. Y. Sports, including golf, quoits, horseshoes and football, will start at 10 a.m. and a luncheon will be served at 1:30 p.m.

The **Railroad Enthusiasts, Inc.**, New York division, in cooperation with the **New York Society of Model Engineers**, the **Railway & Locomotive Historical Society** and the **Railroadians of America**, are sponsoring a rail fan trip on June 19, from New York into Connecticut and return, on the New York, New Haven & Hartford. Tickets at $4.90 may be obtained by writing to Edward A. Hansen, Box 63, Packanack Lake, N. J.

A list of Meetings and Conventions appears on pages 65 through 67.

CAR SERVICE

I.C.C. Service Order No. 775-A, effective at 11:59 p.m. on May 31, vacated Service Order No. 775 which had already been scheduled to expire at that time. The vacated order had maintained the system of super-demurrage charges on freight cars, other than refrigerator cars used for the transportation of perishable commodities.

EQUIPMENT AND SUPPLIES

Domestic Equipment Orders Reported in May

An order by the Southern for 200 70-ton steel covered hopper cars from the Pullman-Standard Car Manufacturing Company, to cost about $1,200,000, was the only domestic freight car order reported by *Railway Age* in May. Locomotive orders reported in May included the 10 1,500-hp. Diesel-electric road units and four 1,000-hp. Diesel-electric switching units ordered by the Chicago & Eastern Illinois from the Electro-Motive Division of General Motors Corporation; and the five 1,500-hp. and two 1,000-hp. Diesel-electric road-switching units ordered by the Central of Georgia from the Baldwin Locomotive Works. The estimated cost of the locomotives is $2,850,000. No passenger car orders were reported.

During the first five months of 1949, *Railway Age* has reported domestic orders for 3,385 freight cars and 30 passenger cars, costing an estimated $17,040,000; and 90 Diesel-electric locomotive units, 13 steam and 4 electric locomotives, the total estimated cost of which is $19,902,600.

LOCOMOTIVES

C. & O. Ordering 140 Diesel Locomotive Switching Units

The Chesapeake & Ohio is ordering 140 Diesel-electric locomotive switching units, 80 of which will be for the Chesapeake district and 60 for the Pere Marquette district.

The bulk of the units will be of 1,000 hp., with some of 1,500 hp.; they will be built by the Electro-Motive Division of the General Motors Corporation and the American Locomotive Company.

"We have been studying economies as a whole all over the railroad incident to the dropoff in tonnage and higher operating costs with the 40-hr. week coming," Walter J. Tuohy, C. & O. president, said. "It appears to us that there are very substantial savings in the use of Diesels for switching purposes only. There is no research going on at present in the use of coal-burning locomotives as competition for Diesels for switching. There is very active research on coal-burning gas turbines in progress. We are hopeful that the coal-burning turbine will take care of the competition with Diesels for road locomotive work, but there is no work being done on a competitive unit for switching. It is incumbent upon us to economize and not to rely only on increases in freight rates."

Mr. Tuohy pointed out that the Diesels being ordered for the Chesapeake district will displace coal-burning switchers that

consume a total of 225,000 tons of coal a year. The Chesapeake & Ohio still buys 4,000,000 tons of coal each year for its locomotives.

The **Chicago, South Shore & South Bend** has purchased three 5,530-hp. electric locomotives—originally intended for shipment to Russia—from the General Electric Company. The locomotives are of standard gage, are 88 ft. 10 in. long, and weigh 545,600 lb. Designed for line current at 3,300 volts, the railroad will rewire the units for the 1,500-volt South Shore power and put them into main-line freight service in several months.

The **Great Northern** has ordered 54 Diesel-electric locomotive units at an estimated cost of $7,300,000. The Electro-Motive Division of General Motors Corporation will build 5 1,500-hp. and 3 3,000-hp. passenger, 5 6,000-hp. freight, and 3 600-hp. and 8 1,000-hp. switching locomotives. The American Locomotive Company will build 10 1,000-hp. switching and 2 1,500-hp. road-switching locomotives. All are scheduled for delivery in 1950. Authorization for their purchase was reported in *Railway Age* of May 21.

SIGNALING

The **Baltimore & Ohio** has ordered materials from the General Railway Signal Company for the installation of an all-relay electric interlocking at Grafton, W. Va. The 28- by 86-in. control panel will be equipped with 34 track indication lights and 72 levers for the control of 32 switch machines, a switch lock and 43 signals. Type-B plug-in relays will be used.

ABANDONMENTS

New York, New Haven & Hartford.—The Interstate Commerce Commission has authorized this road to withdraw its application for authority to abandon a line from Collinsville, Conn., to New Hartford, 6.1 mi.

Division 4 of the Interstate Commerce Commission has **authorized:**

Missouri Pacific.—To abandon its 27.5-mi. Mound City branch from Monteith Junction, Mo., to Mound City. The commission's report said that discontinuance of the line would inconvenience a few shippers in Pleasanton and Mound City, but that Pleasanton would continue to be served by the St. Louis-San Francisco. The report added that although Mound City would be deprived of rail-transportation facilities, it has considerable common-carrier trucking service. The abandonment is subject to the condition requiring that the M.P. sell the branch or any portion thereof to any person offering, within 40 days from May 20, to purchase it for continued operation and willing to pay not less than the net salvage value.

Southern Pacific.—To abandon a 6,186-ft. track and appurtenant spurs in Marysville, Cal., which have provided facilities for the interchange of traffic with the Western Pacific and the Sacramento Northern. The latter two roads and interested shippers were protestants to the application, but it was supported by the California Department of Public Works and the city of Marysville because the line was in the way of a proposed state highway. In approving the abandonment, the commission found that the public benefits from the highway would "far outweigh" the "minor damage or inconvenience" that might be incurred by shippers. At the same time it refused to require the S.P. to construct a substitute interchange track in Marysville, in view of the fact that the road had available other interchange points over which the interline traffic could be handled without "seriously" impairing the present service.

Southern Pacific.—To abandon operation over a line owned by the Central Pacific from a point near Mina, Nev., to a point near Tonopah Junction, 7.9 miles. Authority to abandon the segment was also granted the C.P. The commission's report said the line appeared to have outlived its usefulness and that neither present nor prospective traffic is sufficient to warrant its retention.

CONSTRUCTION

I. C. Announces $6,300,000 Bridge Span Renewal Program

A $6,300,000 program for the renewal of the spans of the Ohio River bridge at Cairo, Ill., has been announced by the Illinois Central. The work, scheduled to begin this month, will require about three years for completion. The new spans will be erected on the existing piers, three of which will be repaired. Three new piers will be constructed midway between the existing piers on the Kentucky shore to permit replacing three 400-ft. through spans, at present in use, with six 200-ft. deck spans.

The bridge, one of the first all-steel railroad bridges erected, was opened for service in October, 1889. To meet the requirements of heavier power being operated over the bridge, it was strengthened in 1914. The approaches were rebuilt in 1934.

Manitoba Rail Line Asked

Mining communities in northern Manitoba are reported to have asked the provincial and Canadian federal governments to begin construction of a railway from Sherridon, Man., to Lynn Lake, 125 mi. north. A 12-year supply of nickel, copper and other ores, estimated to be worth $90 million, is said to be already assured in the Lynn Lake area on the basis of preliminary exploration.

Monongahela.—Division 4 of the Interstate Commerce Commission has authorized this road to construct an extension of its Paw Paw branch from Grant Town, W. Va., to a point near the headwaters of Sugar Run, approximately 8.32 miles to serve a mining operation (see *Railway Age* of March 19, page 105). The commission's report said the construction would permit the immediate development of 10,000 acres of coal land containing approximately 85,000,000 recoverable tons of high grade bituminous coal.

FINANCIAL

Belt of Chicago.—*Trackage Rights.*—Division 4 of the Interstate Commerce Commission has approved this road's application for approval of a supplemental agreement extending for 13 years from January 31 an agreement under which it operates under trackage rights over lines of the Baltimore & Ohio Chicago Terminal. The agreement has been in effect since 1929, and the new expiration date will be January 31, 1962. The supplemental agreement terms are the same as under the old agreement, except the price for handling loaded or empty cars on the joint line will be increased from 66 to 74 cents during the first six years of operation, at the end of which time another adjustment in accordance with an agreed formula will be made.

Chesapeake & Ohio.—*Bars Cash Settlement with P.M. Dissenters.*—Reporting on reconsideration of the proceeding involving the merger of the Pere Marquette into this road, the Interstate Commerce Commission has modified the terms and conditions under which it approved the merger so as to eliminate provisions for cash settlements with dissenting P.M. preferred stockholders. The modification was made to conform with a decision of the United States Supreme Court which sent the case back to the commission for additional findings which would pass upon the claims of the dissenters (see *Railway Age* of May 15, 1948, page 204).

The latter, who carried the case to the Supreme Court, comprised a group headed by Albert E. Schwabacher, and their holdings were less than 2 per cent of the preferred issue involved. Accrued dividends on the stock amounted to $72.50 a share as of the commencement of the controversy. The P.M. charter provided for full payment of this stock at par, plus accrued unpaid dividends, "in the event of dissolution, liquidation, or winding up of the company, voluntary or involuntary . . . before any amounts are paid to holders of the . . . common stock." The dissenters contended that the merger amounted to a "winding up" of the P.M. under the charter clause as construed by Michigan law; and they insisted that their shares be recognized in

the merger plan on the basis of at least $172.50 each.

After approving that phase of the merger plan which involved the exchange of this P.M. preferred by the assenting holders, the commission's original report, by Division 4, went on to disclaim jurisdiction to pass upon the further claims which the dissenting holders asserted on the basis of their interpretation of the Michigan law. This disclaimer, however, "does not mean that the Chesapeake & Ohio and the Pere Marquette do not remain free to settle controversies with dissenting stockholders through negotiation and litigation in the courts," the division's report added. And it proceeded to find that the maximum possible cost of settling such controversies would impose no financial burden or excessive expenditure on the merged company.

It was because this matter of further litigation was left "in suspense" that the Supreme Court sent the case back to the commission. The court's decision did not require the commission to accord the dissenters more favorable treatment than the assenting holders of the same stock; it held in effect that commission approval of a merger as "just and reasonable" and "consistent with the public interest" was inconsistent if there were left untied any loose ends in the nature of potential capital liabilities against the merged property. Noting the overriding character of federal law, the court held further that, in passing upon the claims of the dissenters, the commission must look for standards "only in the Interstate Commerce Act," and not to what the legal rights of the dissenters were under the P.M. charter and Michigan law.

It was in that light that the commission reconsidered the claims. It found that, if they had any value, it would be only one that would reflect the probability of an actual liquidation of the P.M. On that score, the commission found the record in the proceeding showing that the P.M.'s existence "could not have been terminated short of an abandonment of all the railroads of the country." Market opinion as reflected in market quotations was also found to have "discounted heavily" the possibility of liquidation.

"Under these circumstances," the commission continued, "little weight can be given to the liquidation preference as such. In our opinion, these rights were given adequate consideration by the division in reaching the conclusions stated in the report of April 1, 1947 (see *Railway Age* of April 5, 1947, page 704), and are fully reflected in the merger terms." As reported above, the commission then proceeded to modify the division's report to eliminate any authority for a cash settlement with the dissenters. The litigation did not delay consummation of the merger which has been in effect since June 6, 1947.

Des Moines & Central Iowa.—*Reorganization.* — Division 4 of the Interstate Commerce Commission has fixed maximum limits of final allowances for services and expenses incurred in this road's reorganization proceeding by parties in interest and their counsel during the period generally from November 13, 1946, to termination of the proceeding early this year. The division allowed $31,828 on claims of $43,228. The entire cut of $11,400 was applied to the claim of M. H. Snerson, a member of the bondholders group, who was allowed $2,270 on a claim of $13,670. The $2,270 was for the group's expenses, allowable under section 77, which, the commission said, "makes no provision for payment out of the debtor's estate of compensation for services of members of a bondholders group." Meanwhile, the largest award—$13,327, the amount claimed—went to Claude I. Depew, W. E. Stanley and Alex M. Miller, who were counsel for the bondholders group.

Lackawanna & Wyoming Valley.—*Withdraws Debt-Adjustment Plan.*—This road has advised the Interstate Commerce Commission of its desire to withdraw its application for approval of a plan to modify its securities under provisions of the so-called Mahaffie Act, which is now section 20b of the Interstate Commerce Act. Shortly before receiving the applican't withdrawal petition, the commission had received from Examiner Homer H. Kirby a proposed report recommending that the application be denied on the basis of findings that the proposed alterations would not be in the public interest. Also, there has been filed with the commission a copy of a petition for reorganization of the road under section 77 of the Bankruptcy Act, which has been filed in the United States District Court for the Middle District of Pennsylvania by a protective committee for holders of the 5 per cent first mortgage bonds. Those bonds, due August 1, 1951, and outstanding in the amount of $1,950,000, and a $999,500 issue of 6 per cent debentures which became due February 1, 1948, were the securities involved in the proposed modification plan on which Examiner Kirby made his adverse report. In its petition for permission to withdraw the application, the road said the examiner's report was "in error," but added that it would be "useless to pursue the application further because of the obvious wishes of the first mortgage bondholders to recapitalize applicant under the provisions of section 77."

New Jersey & New York.—*Compensation of Trustee and Counsel.*—Division 4 of the Interstate Commerce Commission has approved compensation at annual rates of $6,000 and $8,500, respectively, for Peter Duryee, as trustee for this road, and for Walter T. Margetts, Jr., as counsel for the trustee, for services to be rendered during the 12 months period subsequent to June 30. The approval order stipulated that Mr. Margetts may accept such additional compensation as may be allowed by the court and approved by the commission for his services to the trustee in connection with pending litigation against the Erie.

Richmond, Fredericksburg & Potomac.—*Stock Split.*—Division 4 of the Interstate Commerce Commission has authorized this road to issue 433,392 shares of stock, par value $25 per share, which will be exchanged for 108,348 shares of outstanding stock, par value $100 per share.

Rio Grande Southern.—*Receiver's Certificates.*—Division 4 of the Interstate Commerce Commission has authorized a further extension from May 1, 1949, to May 1, 1951, of the maturity date of $59,000 of this road's receiver's certificates, which are held by the Reconstruction Finance Corporation. The commission's report noted that the receiver had agreed to pay the R.F.C. at a rate of not less than $1,000 each month during the extension period.

Wheeling & Lake Erie.—*Dividend.*—This road has declared an extra dividend of 68¾ cents a share on the common stock, payable July 1 to stockholders of record June 15.

New Securities

Division 4 of the Interstate Commerce Commission has **authorized**:

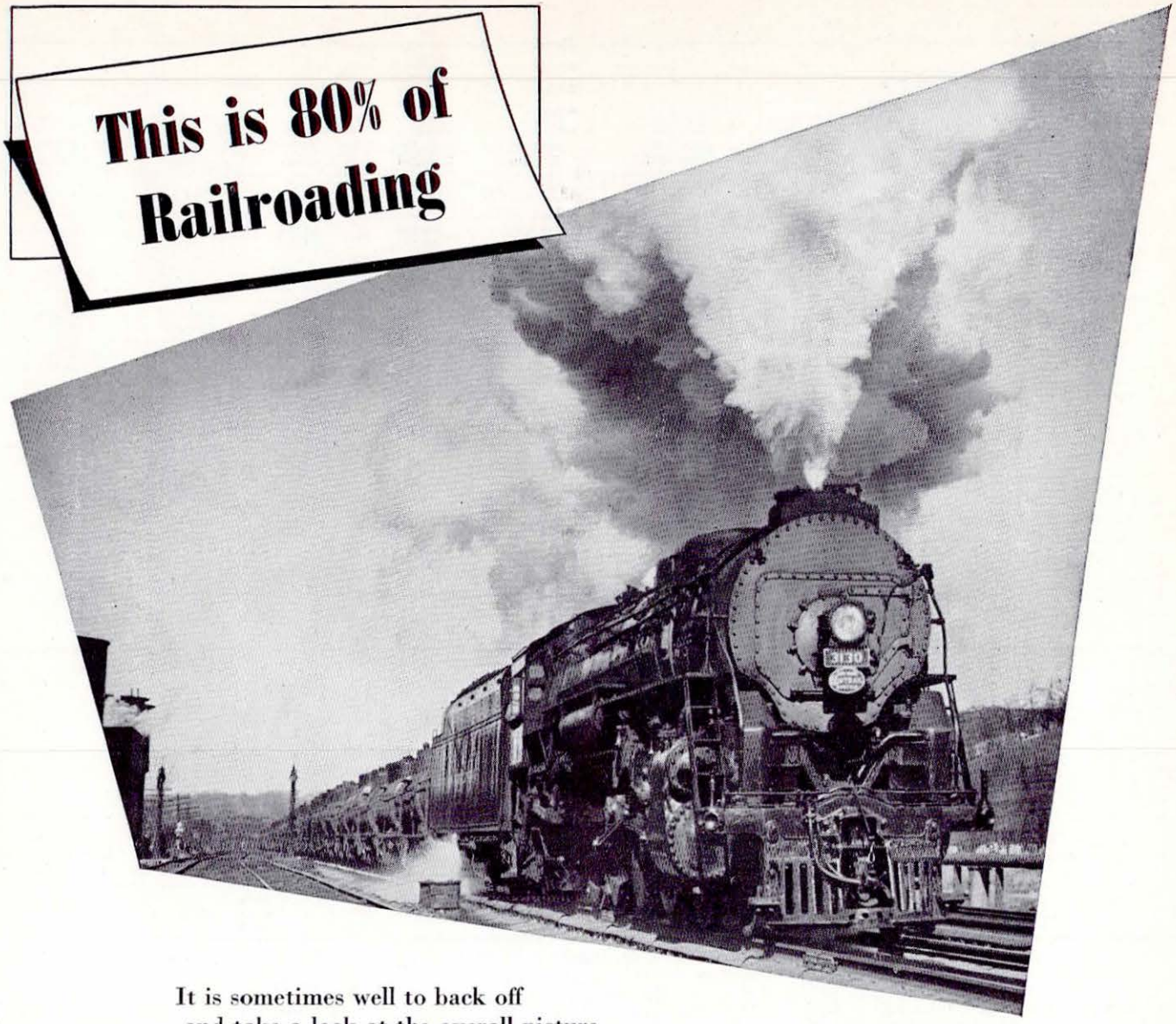
Brownsville & Matamoros Bridge.—To issue $100,000 of unsecured non-interest bearing promissory which will mature in 5 years after date of issue and which will be delivered in exchange for a like amount of outstanding notes due May 31, 1949. The notes are part of a $200,000 issue held by the applicant's proprietors, the National of Mexico and the St. Louis, Brownsville & Mexico.

Cambria & Indiana.—To assume liability for $650,000 of equipment trust certificates to finance in part 200 50-ton steel hopper cars (see *Railway Age* of April 30, page 66). The certificates will be dated June 1, and will mature in 10 annual installments of $65,000 each, beginning June 1, 1950. The commission's report approved a selling price of 99.319 with a 2 per cent interest rate—the bid of Salomon Bros. & Hutzler and three associates, which will make the average annual interest cost approximately 2.15 per cent. The certificates were reoffered to the public at prices yielding from 1.35 to 2.35 per cent, according to maturity.

Chicago Great Western.—To assume liability for $7,020,000 of equipment trust certificates to finance in part 21 Diesel-electric locomotives delivered between October, 1947, and March, 1949, and now used under conditional-sale agreements, and 21 new Diesel-electric locomotives and 75 covered hopper cars (see *Railway Age* of April 30, page 66). The certificates will be dated May 1, and will mature in 27 semi-annual installments of $260,000 each, beginning November 1. The commission's report approved a selling price of 99.613 with a 2¾ per cent interest rate—the bid of Salomon Bros. & Hutzler and three associates, which will make the average annual interest cost approximately 2.82 per cent. The certificates were reoffered to the public

News Department continued on next left-hand page

This is 80% of Railroading



It is sometimes well to back off
and take a look at the overall picture.

We're thinking of the steam locomotive. These locomotives are producing three *billion* ton-miles—and will do it again tomorrow and the next day. They—these steam locomotives—are doing 80 per cent of the work on the railroads—more work than they ever did in any year before 1941.

Many of these locomotives are old, too old, and have distorted the statistics on performance. Many, however, are modern. And on modern steam power—locomotives that pack 5000 to 9000 horsepower and can stay on the road for 16 and 18 hours, and then turn around in an hour or two—the statistics look pretty good.

We build such modern power—and are convinced that it has its place.

LIMA HAMILTON CORPORATION

DIVISIONS: *Lima, Ohio* — Lima Locomotive Works Division; Lima Shovel and Crane Division. *Hamilton, Ohio* — Hooven, Owens, Rentschler Co.; Niles Tool Works Co. *Middletown, Ohio* — The United Welding Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

ANNUAL REPORTS

Railroad		Operating Revenues	Operating Expenses	Fixed Charges	Net Income	Current Assets*	Current Liabilities*	Long Term Debt*
Alabama Great Southern	1948	$18,334,532	$13,312,685	$363,998	$3,401,929	$13,149,634	$4,842,715	$11,767,545
	1947	16,715,178	12,815,937	372,410	2,332,281	11,040,451	4,019,630	12,495,714
Atlantic Coast Line	1948	136,336,690	118,287,514					
	1947	128,429,922	112,461,791	4,050,995	6,003,953	45,436,055	22,464,407	95,890,654
Belt of Chicago	1948	11,837,830	7,757,825	1,618,359	186,824	4,412,952	2,767,424	None
	1947	10,193,921	6,905,932	1,649,908	184,147	3,591,901	1,991,886	None
Bessemer & Lake Erie#	1948	26,415,941	16,307,859	430,616	7,188,051	17,481,845	8,791,415	14,478,000
	1947	22,891,463	13,150,818	466,245	6,980,577	15,734,762	8,272,068	16,043,000
Central of Georgia†	1948	37,805,609	32,878,687	2,921,053	1,021,030d	10,450,272	5,665,062	29,733,283
	1947	32,378,264	29,865,257	5,154,358	5,064,438d	21,372,535	6,783,646	60,066,865
Central of New Jersey	1948	42,736,241	38,223,163	2,476,219	8,488,575d	16,302,717	8,604,887	50,297,986
	1947	37,565,888	34,165,978	2,455,286	3,148,514d	16,550,244	9,428,601	48,923,585
Chicago, St. Paul, Minneapolis & Omaha	1948	34,238,852	28,298,814	2,449,664	354,965d	9,103,864	6,256,044	54,797,742
	1947	31,379,285	25,891,136	2,404,325	676,860d	9,995,266	6,242,031	53,495,903
Cincinnati, New Orleans & Texas Pacific	1948	40,272,864	26,239,267	1,917,650	6,561,482	26,555,731	11,481,444	4,228,000
	1947	34,854,624	23,413,171	1,882,667	4,386,674	22,216,632	9,739,956	5,048,000
Colorado & Southern	1948	13,752,370	11,023,446	610,843	776,683	7,910,668	4,001,711	41,236,598
	1947	12,767,159	10,174,191	613,042	383,207	6,791,259	3,734,215	41,717,205
Duluth, South Shore & Atlantic	1948	6,327,049	5,123,097	900,942	333,154d	4,956,619	765,030	23,630,119
	1947	5,517,693	4,443,737	900,070	335,476d	4,684,728	746,041	23,302,192
Florida East Coast	1948	28,653,199	23,897,809	2,676,575	2,404,135d	25,644,097	585,192	58,106,471
	1947	27,954,333	23,683,283	2,683,798	2,674,216d	25,619,731	1,154,279	58,577,714
Georgia Southern & Florida	1948	7,211,017	5,325,305	320,769	210,732	2,939,404	1,463,536	5,881,229
	1947	6,201,458	4,807,573	320,509	45,070	2,536,410	1,435,547	5,772,974
International-Great Northern	1948	33,757,359	27,672,878	2,845,990	176,938	14,933,328	7,192,498	55,002,270
	1947	30,147,754	25,342,858	2,781,271	1,206,609d	14,672,795	6,682,682	52,428,779

*On December 31
#Including leased lines
†Reorganized effective July 1, 1948
dDeficit

at prices yielding from 1.5 to 2.95 per cent, according to maturity.

Erie.—To assume liability for $3,450,000 of equipment trust certificates to finance in part the acquisition of 36 Diesel-electric locomotives (see *Railway Age* of May 7, page 66). The certificates will be dated May 15 and will mature in 10 annual installments of $345,000 each, beginning May 15, 1950. The commission's report approved a selling price of 99.0599 with a 2 per cent interest rate—the bid of the First Boston Corporation and 2 associates, which will make the average annual interest cost approximately 2.2 per cent. The certificates were reoffered to the public at prices yielding from 2.05 to 2.35 per cent according to maturity.

Pennsylvania.—To assume liability for $10,425,000 of equipment trust certificates to finance in part the acquisition of 33 Diesel-electric locomotives, 43 passenger-train cars, and 500 gondola cars (see *Railway Age* of May 14, page 70). The certificates will be dated May 1 and will mature in 15 annual installments of $695,000 each, beginning May 1, 1950. The commission's report approved a selling price of 99.77566 with a 2½ per cent interest rate—the bid of Harriman Ripley & Co. and Lehman Brothers and 5 associates, which will make the average annual interest cost approximately 2.55 per cent. The certificates were reoffered to the public at prices yielding from 1.45 to 2.7 per cent according to maturity.

Washington Terminal.—To issue and sell $1,600,000 of series B first mortgage bonds to reimburse its treasury in part for expenditures made for additions, betterments and improvements. This company's proprietors, the Philadelphia, Baltimore & Washington (subsidiary of the Pennsylvania), and the Baltimore & Ohio, will guarantee these bonds, which will be secured by the W.T.'s first mortgage dated February 1, 1945. The bonds will be dated May 1, 1949, and will mature May 1, 1974. The commission's report approved a selling price of 98.051 with a 2½ per cent interest rate—the bid of Adams & Peck, which will make the average annual cost approximately 2.61 per cent. For sinking fund purposes, redemption prices will range from 102⅜ and accrued interest on May 1, 1951, to par and accrued interest on and after May 1, 1970. The bonds will also be redeemable at the option of the W.T. as a whole, or in part, in amounts not less than $100,000, on not less than 45 days' notice, at prices ranging from 105 and accrued interest on May 1, 1950, to par and accrued interest from November 1, 1969, to maturity.

Applications have been filed with the I.C.C. by:

Helena & Northwestern.—To issue 1,000 shares of common stock, par value $100 per share; 1,000 shares of preferred stock, par value $100 per share; and a per cent promissory note for $200,000. Total of securities to be issued is $400,000. Of this, $300,000 would be used to acquire a 54-mi. line of the Missouri & Arkansas extending from Helena, Ark. to Cotton Plant, together with 6 miles of sidings (see *Railway Age* of October 23, 1948, page 61); $75,500 for rehabilitation purposes; $12,000 for equipment; and $12,500 for working capital.

Dividends Declared

Boston & Albany.—$2.00, payable June 30 to holders of record May 31.

Chicago, South Shore & South Bend.—25¢, payable June 15 to holders of record June 6.

Dayton & Michigan.—8% preferred, $1.00, quarterly, payable July 5 to holders of record June 15.

Erie.—Common, 50¢, payable June 20 to holders of record May 31.

Kansas City Southern.—common, $1.00, payable June 15 to holders of record May 31; 4% preferred, $1.00, quarterly, payable July 15 to holders of record June 30.

Massawippi Valley.—$3.00, semiannual, payable August 1 to holders of record July 30.

New York & Harlem.—$2.00, semiannual, payable July 1 to holders of record June 10.

Pittsburgh, Fort Wayne & Chicago.—common, $1.75, quarterly; 7% preferred, $1.75, quarterly; payable July 1 and July 5, respectively, to holders of record June 10.

Reading.—4% 2nd preferred, 50¢, quarterly, payable July 14 to holders of record June 23.

Texas & Pacific.—common, $1.00; 5% non-cumulative preferred, $1.25, quarterly; both payable June 30 to holders of record June 16.

Union Pacific.—$1.25, quarterly, payable July 1 to holders of record June 6.

Ware River.—$3.50, semiannual, payable July 16 to holders of record June 16.

Wheeling & Lake Erie.—75¢, quarterly, extra, 68¾¢; both payable July 1 to holders of record June 15.

Average Prices Stocks & Bonds

	May 31	Last week	Last year
Average price of 20 representative railway stocks	37.58	38.59	54.62
Average price of 20 representative railway bonds	84.75	85.73	89.94

RAILWAY OFFICERS

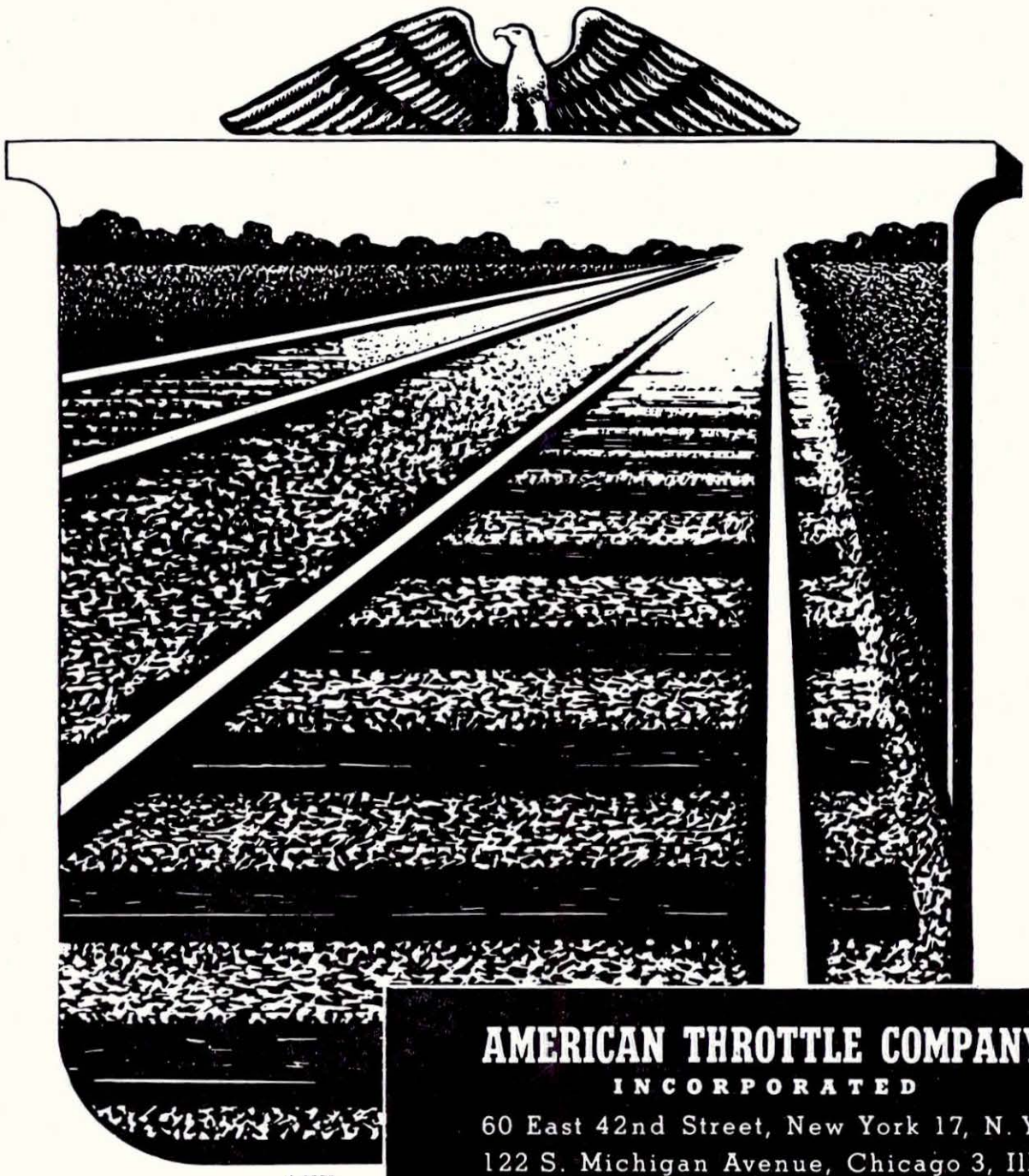
FINANCIAL, LEGAL & ACCOUNTING

Theodore K. Warner, Jr., assistant general counsel of the Pennsylvania, at Philadelphia, Pa., has been promoted to general attorney. Born in Philadelphia in

News Department continued on next left-hand page

Slipping DRIVERS
damage Rails *as well as* Tires

CONTROL THIS CONDITION WITH THE THROTTLE MASTER

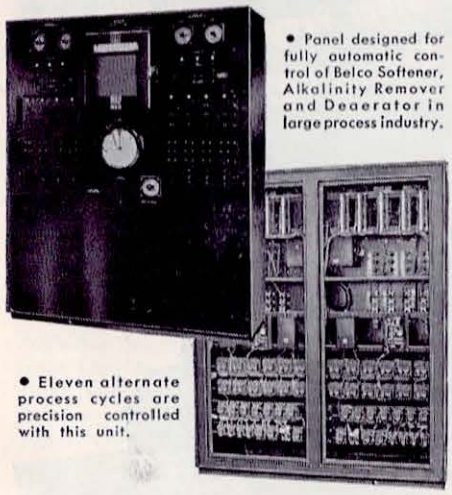


A-1925

AMERICAN THROTTLE COMPANY
INCORPORATED
60 East 42nd Street, New York 17, N. Y.
122 S. Michigan Avenue, Chicago 3, Ill.

FOR FULLY AUTOMATIC CONTROL OF ALL WATER TREATMENT PROCESSES

EXPERIENCE COUNTS



• Panel designed for fully automatic control of Belco Softener, Alkalinity Remover and Deaerator in large process industry.

• Eleven alternate process cycles are precision controlled with this unit.

Belco engineers are thoroughly experienced in all phases of completely automatic water treatments. By applying this wide experience to your processes you can avoid the losses that result from outdated control — you can reap the savings that result from modern simplified automatic Belco control. Experience counts . . . Belco has, for example, the advantage gained through designing and building the worlds largest fully automatic demineralization and silica removal plant.

MODERNIZATION OF EXISTING PLANTS RESULTS IN LARGE OPERATING SAVINGS

Ask a Belco engineer how modernization might effect substantial savings in your present operations. Ask about the application of the Belco automatic controls to other processes in your plants.

BELCO INDUSTRIAL EQUIPMENT DIVISION, INC.
50 Iowa Avenue Paterson 3, N. J.
In midwest: Deady Chemical Co., Kansas City, Mo.
In southwest: Watermasters, Inc., Houston, Tex.
In Pacific: Deady Chemical Co., Los Angeles, Cal.

Belco

PROCESSES FOR REMOVAL OF WATER IMPURITIES

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, September 12-14, 1949, Edgewater Beach Hotel, Chicago, Ill.

Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 27-29, 1949, Congress Hotel, Chicago, Ill.

Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 20-21, 1949, La Salle Hotel, Chicago, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C. Annual meeting, June 27-29, 1949, Palmer House, Chicago, Ill.

Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 14-16, 1949, Boston, Mass.

Motor Transport Division.—Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, October 26-28, 1949, General Oglethorpe Hotel, Savannah, Ga.

Traffic Department.—Walter J. Kelly, Traffic Officer, Transportation Bldg., Washington 6, D. C.

Association of Railroad Advertising Managers.—Samuel E. McKay, Baltimore & Ohio R. R., Grand Central Station, Chicago 7, Ill.

Association of Railway Claim Agents.—F. L. Johnson, Gulf, Mobile & Ohio R. R., Mobile 5, Ala.

Bridge and Building Supply Men's Association.—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill.

Canadian Railway Club.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

Car Department Association of St. Louis.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St.

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 128 reports (Form 1BS) representing 132 steam railways.
(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

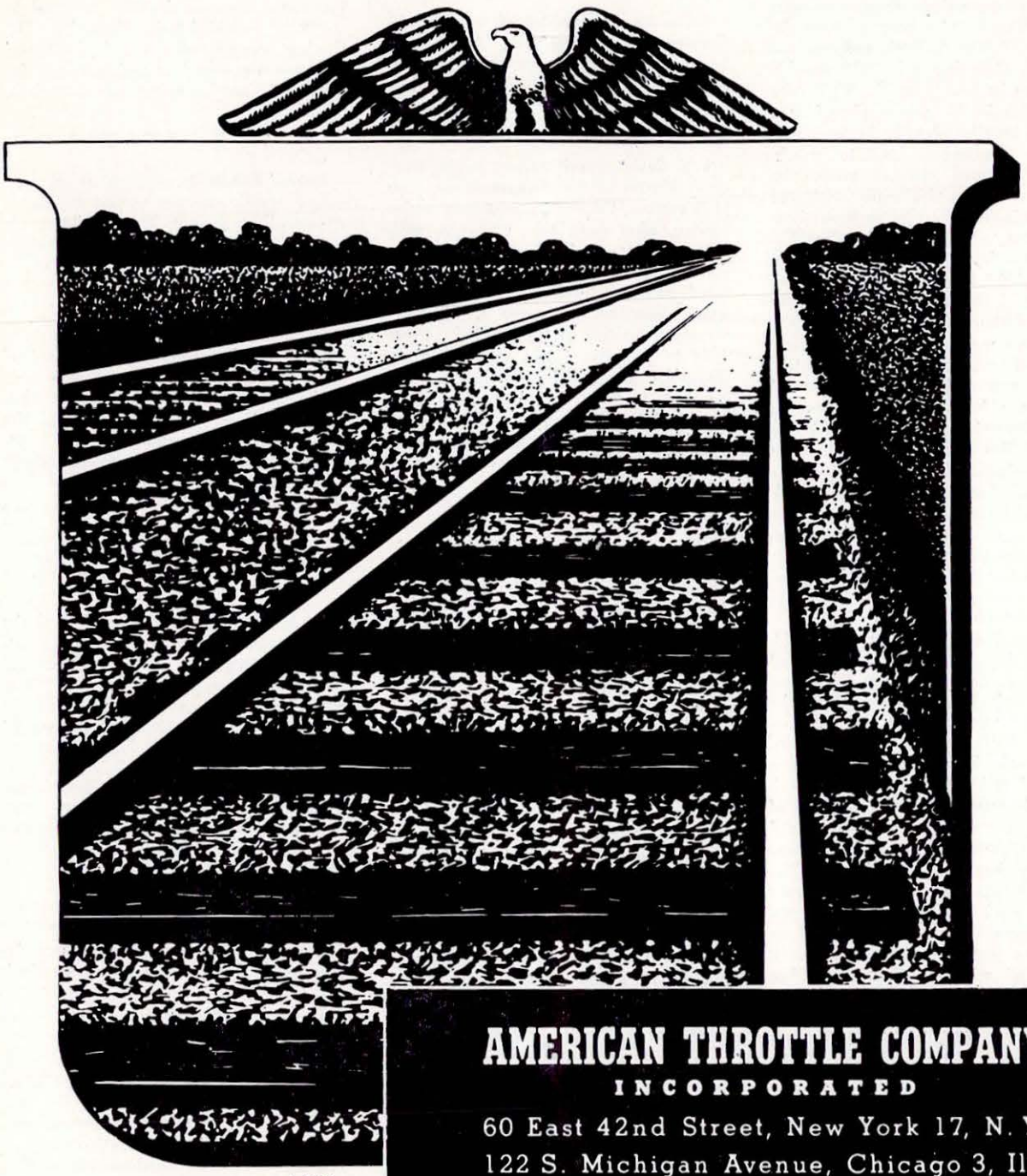
Income Items	United States: For month of February 1949	For month of February 1948	For the two months of 1949	For the two months of 1948
1. Net railway operating income	$29,754,215	$39,425,294	$62,998,695	$81,071,747
2. Other income	14,799,573	20,055,667	33,095,827	39,425,466
3. Total income	44,553,788	59,480,961	96,094,522	120,497,213
4. Miscellaneous deductions from income	3,366,305	3,441,779	6,990,241	7,286,990
5. Income available for fixed charges	41,187,483	56,039,182	89,104,281	113,210,223
6. Fixed charges:				
6–01. Rent for leased roads and equipment	8,738,526	10,270,438	16,845,744	20,059,928
6–02. Interest deductions[1]	24,575,865	24,234,726	49,130,313	48,578,474
6–03. Other deductions	177,528	136,387	345,053	279,621
6–04. Total fixed charges	33,491,919	34,641,551	66,321,110	68,918,023
7. Income after fixed charges	7,695,564	21,397,631	22,783,171	44,292,200
8. Other deductions	3,060,476	3,151,397	6,214,115	6,390,611
9. Net income	4,635,088	18,246,234	16,569,056	37,901,589
10. Depreciation (Way and structures and Equipment)	32,767,951	30,178,996	65,435,222	60,291,088
11. Amortization of defense projects	1,368,167	1,685,277	2,748,693	3,053,875
12. Federal income taxes	18,653,423	22,323,963	37,406,418	46,065,627
13. Dividend appropriations:				
13–01. On common stock	18,607,788	26,503,653	25,009,383	29,662,262
13–02. On preferred stock	3,792,165	4,268,196	13,459,824	6,593,944
Ratio of income to fixed charges (Item 5 ÷6—04)	1.23	1.62	1.34	1.64

Selected Expenditure and Asset Items	United States: Balance at the end of February 1949	Balance at the end of February 1948
17. Expenditures (gross) for additions and betterments—Road	$45,807,666	$39,978,898
18. Expenditures (gross) for additions and betterments—Equipment	172,583,672	129,461,023
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	519,198,716	564,513,121
20. Other unadjusted debits	130,781,960	166,073,195
21. Cash	880,507,529	939,272,443
22. Temporary cash investments	1,010,231,850	981,926,950
23. Special deposits	116,721,574	127,287,363
24. Loans and bills receivable	1,902,988	12,624,511
25. Traffic and car-service balances—Dr.	48,236,003	51,524,309
26. Net balance receivable from agents and conductors	133,167,535	139,298,679
27. Miscellaneous accounts receivable	316,794,040	335,082,393
28. Material and supplies	881,765,810	788,305,409
29. Interest and dividends receivable	11,765,621	16,114,782
30. Accrued accounts receivable	148,211,643	173,298,971
31. Other current assets	40,595,108	40,929,027
32. Total current assets (items 21 to 31)	3,589,899,701	3,605,664,837
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$204,736,532	$134,823,747
41. Loans and bills payable[3]	4,341,352	3,915,000
42. Traffic and car-service balances—Cr.	83,348,882	108,899,889
43. Audited accounts and wages payable	587,856,117	627,972,491
44. Miscellaneous accounts payable	194,161,599	208,715,465
45. Interest matured unpaid	34,709,872	46,562,069
46. Dividends matured unpaid	9,788,025	8,200,229
47. Unmatured interest accrued	92,495,293	85,547,963
48. Unmatured dividends declared	48,017,861	40,643,864
49. Accrued accounts payable	235,687,407	185,055,792
50. Taxes accrued	772,186,934	659,817,550
51. Other current liabilities	78,948,341	113,204,363
52. Total current liabilities (items 41 to 51)	2,141,541,683	2,038,534,675
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	642,766,187	539,968,542
53–02. Other than U. S. Government taxes	129,420,747	119,849,008
54. Other unadjusted credits	278,576,396	335,483,339

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

Slipping DRIVERS
damage Rails *as well as* Tires

CONTROL THIS CONDITION WITH THE THROTTLE MASTER



A-1925

AMERICAN THROTTLE COMPANY
INCORPORATED
60 East 42nd Street, New York 17, N. Y.
122 S. Michigan Avenue, Chicago 3, Ill.

1909, Mr. Warner is an honor graduate of the University of Pennsylvania's Law School and of its College department. He started with the railroad in 1934 as a law clerk and in his work through the legal department has specialized largely in taxation matters.

Paul S. Young, real estate and tax agent of the Bessemer & Lake Erie at Pittsburgh, Pa., has been appointed real estate and tax agent of the Union Railroad.

John Wagner, manager of industrial development of the Reading at Philadelphia, Pa., has been appointed real estate agent, with the same headquarters, succeeding **Willard W. James,** who has retired after more than 46 years of service. Mr. Wagner was born at Phoenixville, Pa., on June 6, 1892, and received his B.S. in C.E. degree in 1913 and his C.E. degree in 1920 from the University of Pennsylvania. He was employed as a draftsman by the Phoenix Bridge Company from September, 1913, to March, 1916, and entered railroad service on the latter date as draftsman with the Pennsylvania, leaving this position three months later to serve with the First Cavalry, Pennsylvania National Guard. In February, 1917, he returned to the Pennsylvania as draftsman and three months later joined the United States Army Expeditionary Forces, serving as first lieutenant and captain. From September, 1919, to January, 1921, he again served as draftsman for the P.R.R., becoming assistant supervisor of track of the Philadelphia & Reading (now Reading) on March 15, 1921. Mr. Wagner served as acting supervisor of track of the Reading from February to August, 1926, then becoming supervisor of track. He was appointed industrial agent in June, 1928; assistant general freight agent in July, 1936; and manager of industrial development in December, 1945.

Mr. James was born at Mansfield, Conn., on May 18, 1880, and received his B. Agric. degree in 1899 from Connecticut Agricultural College (now the University of Connecticut). He was employed by Sanderson & Porter, engineers, at New York, from 1900 to 1903, when he entered railroad service in the engineering department of the Central of New Jersey, serving successively until 1915 as transitman and resident engineer on construction and general work. Mr. James was appointed assistant engineer, valuation work in 1915; valuation engineer at New York in 1921, and real estate and tax agent and valuation engineer in 1933, all with the Central of New Jersey. From 1938 to 1943 he was real estate and tax agent of the Reading and the C.N.J. at Philadelphia, and since 1943 has been real estate agent of the Reading.

E. Ellsworth Pancost, assistant to the treasurer of the New York Central, has been appointed assistant treasurer in charge of the stock and bond divisions, with headquarters as before at New York, succeeding **Edward Coles,** who has retired after 50 years of service with the N.Y.C.

J. W. Severs, vice-president and comptroller of the Chicago, Milwaukee, St. Paul & Pacific at Chicago, has been elected vice-president—finance and accounting, and **R. S. Stephenson,** assistant comptroller, has been elected comptroller. **W. Kruckstein,** assistant comptroller at Chicago, has been appointed general auditor at that point. The posts formerly held by Mr. Kruckstein and Mr. Stephenson have been abolished.

OPERATING

Julius Johnson, auditor of the Midland Continental at Jamestown, N. D., has been promoted to acting general manager and treasurer, succeeding the late **Carl W. Cockrell,** whose death was reported in the *Railway Age* of March 5.

L. E. Covin, superintendent of the Waycross district of the Atlantic Coast Line at Waycross, Ga., has retired from active service, after more than 25 years with that road. Mr. Covin was born in Walker county, Ala., on January 1, 1891, and entered railroad service in 1905 as telegraph operator and agent on the Birmingham division of the Southern. From 1910 to 1923 Mr. Covin served as train dispatcher and chief dispatcher for the Southern in Mississippi (now the Columbus & Greenville) and the Birmingham division of the Southern. He was chief dispatcher and trainmaster of the Atlantic Coast Line from 1924 to 1942, at Lakeland, Fla., Sebring, Fla., and Waycross, Ga., successively. From July 30, 1942, to November 3, 1945, Mr. Covin served with the 703rd Railway Grand Division, Military Railway Service, in North Africa, Italy, France, and Germany, as lieutenant colonel and colonel. On January 1, 1946, he returned to the Atlantic Coast Line as superintendent of the Waycross district.

M. L. Chastain has been appointed trainmaster of the Birmingham district of the Atlantic Coast Line, with headquarters at Manchester, Ga.

T. W. Parsons, assistant to general manager of the Seaboard Air Line at Jacksonville, Fla., has retired after a railroading career of nearly half a century.

A. C. Ellzey, Jr., has been appointed trainmaster of the Illinois Central, with headquarters at Jackson, Miss., succeeding **R. O. Bodell,** whose transfer to Markham, Ill., was reported in *Railway Age* of April 9.

W. H. Price, assistant superintendent of the Canadian Pacific at Moose Jaw, Sask., has been promoted to superintendent at Brandon, Man., succeeding **W. E. Kingston,** who has retired after 47 years of service. **J. V. Forrest,** special representative at Winnipeg, Man., has been advanced to replace Mr. Price.

Fred Price Stocker, whose retirement as superintendent, Eastern district, of the Missouri-Kansas-Texas Lines, with headquarters at Franklin, Mo., was reported in the *Railway Age* of May 7, was born on February 16, 1876, at Port Washington, Ohio, and entered railroad service in August, 1892, as a telegrapher on the Pittsburgh division of the Pennsylvania. He was employed by the Illinois Central as dispatcher from 1901 to 1903, when he joined the Katy in the same capacity, being promoted to chief train dispatcher in 1905. Four years later he left that road to serve on the Southern at Louisville, Ky., and in 1910 returned to the Katy as chief train dispatcher. Mr. Stocker became trainmaster in 1912, and subsequently served as assistant superintendent before becoming superintendent.

TRAFFIC

Richard B. Baldwin, assistant to the passenger traffic manager of the Bangor & Aroostook at Bangor, Me., has been appointed special assistant to the freight traffic manager.

MECHANICAL

O. T. Butcher, shop superintendent of the Pere Marquette district of the Chesapeake & Ohio at St. Thomas, Ont., has been appointed master mechanic of the Canadian division, with the same headquarters, succeeding **Ernest Woodruff,** who has retired after 41 years of continuous service with the company.

ENGINEERING & SIGNALING

H. M. Booth, division engineer of the St. Louis-San Francisco, with headquarters at Springfield, Mo., has been appointed division engineer at that point, with jurisdiction over Rolla, Lebanon and Springfield sub-divisions, Eastern division, including the St. Louis, Mo., and Springfield terminals. **H. F. Busch,** division engineer at Memphis, Tenn., has been transferred to Springfield, with jurisdiction over the Clinton, Willow Springs and Memphis sub-divisions, Eastern division, including the Memphis terminal. **G. L. Harris,** division road master at Amory, Miss., has been promoted to division engineer at Yale, Tenn., with jurisdiction over the Southern division, including the Birmingham (Ala.) terminal.

SPECIAL

James F. Blair, assistant general auditor of the Chicago, Burlington & Quincy at Chicago, has been elected to the newly created administrative position of general manager of the Association of Western Railways, with headquarters at Chicago.

ORGANIZATIONS

(Continued from page 58)

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill. Annual meeting, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill. Exhibit in conjunction with the meeting of the Coordinated Railroad Mechanical Associations, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC AGENTS.—C. A. Melin, 11115 Lake Ave., Cleveland 2, O. Annual meeting, September 26, Asheville, N. C., followed by post-convention trip through Smoky Mountain district.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C.R.R. of N. J., 143 Liberty St., New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 14-16, 1949, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 12-14, 1949, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—W. A. Kleunder, Chicago & Northwestern Railway, St. Paul, Minn.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 14-16, 1950, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—Hugh L. Fitts, Missouri Pacific Magazine, 1400 M. P. Bldg., St. Louis 3, Mo. Annual meeting, November 2-4, 1949, Gunter Hotel, San Antonio, Tex.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, Tower Bldg., Washington 5, D. C.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Annual meeting, June 27-July 1, 1949, Chalfonte-Haddon Hall Hotel, Atlantic City, N. J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York 18, N. Y.

Railroad Division.—E. L. Woodward, Railway Mechanical Engineer, 105 W. Adams St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—H. L. Dawson, 1427 Eye St., N. W., Washington 5, D. C.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.—R. A. Ellison, Cincinnati Chamber of Commerce, 1203 C. of C. Bldg., Cincinnati 2, O.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, October 4-6, 1949, Miami, Fla.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.—J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—A. H. Grothmann, 30 Vesey St., New York 7, N. Y. Annual meeting, September 27-29, 1949, Wentworth By-the-Sea Hotel, Portsmouth, N. H.

Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, October 18-20, 1949, Ambassador Hotel, Atlantic City, N. J.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, June 6, 1949, Chalfonte-Haddon Hall Hotel, Atlantic City, N. J.

Protective Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Safety Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 14-16, 1950, Chicago, Ill.

Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 22, 1949, La Salle Hotel, Chicago, Ill.

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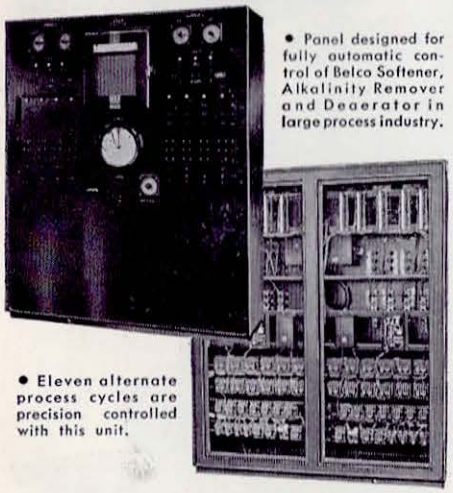

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PROCESSES FOR REMOVAL OF WATER IMPURITIES

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, September 12-14, 1949, Edgewater Beach Hotel, Chicago, Ill.

Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 27-29, 1949, Congress Hotel, Chicago, Ill.

Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 20-21, 1949, La Salle Hotel, Chicago, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C. Annual meeting, June 27-29, 1949, Palmer House, Chicago, Ill.

Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 14-16, 1949, Boston, Mass.

Motor Transport Division.—Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, October 26-28, 1949, General Oglethorpe Hotel, Savannah, Ga.

Traffic Department.—Walter J. Kelly, Traffic Officer, Transportation Bldg., Washington 6, D. C.

Association of Railroad Advertising Managers.—Samuel E. McKay, Baltimore & Ohio R. R., Grand Central Station, Chicago 7, Ill.

Association of Railway Claim Agents.—F. L. Johnson, Gulf, Mobile & Ohio R. R., Mobile 5, Ala.

Bridge and Building Supply Men's Association.—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill.

Canadian Railway Club.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

Car Department Association of St. Louis.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St.

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 128 reports (Form IBS) representing 132 steam railways.
(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

United States

Income Items	For month of February 1949	For month of February 1948	For the two months of 1949	For the two months of 1948
1. Net railway operating income	$29,754,215	$39,425,294	$62,998,695	$81,071,747
2. Other income	14,799,573	20,055,667	33,095,827	39,425,466
3. Total income	44,553,788	59,480,961	96,094,522	120,497,213
4. Miscellaneous deductions from income	3,366,305	3,441,779	6,990,241	7,286,990
5. Income available for fixed charges	41,187,483	56,039,182	89,104,281	113,210,223
6. Fixed charges:				
6–01. Rent for leased roads and equipment	8,738,526	10,270,438	16,845,744	20,059,928
6–02. Interest deductions[1]	24,575,865	24,234,726	49,130,313	48,578,474
6–03. Other deductions	177,528	136,387	345,053	279,621
6–04. Total fixed charges	33,491,919	34,641,551	66,321,110	68,918,023
7. Income after fixed charges	7,695,564	21,397,631	22,783,171	44,292,200
8. Other deductions	3,060,476	3,151,397	6,214,115	6,390,611
9. Net income	4,635,088	18,246,234	16,569,056	37,901,589
10. Depreciation (Way and structures and Equipment)	32,767,951	30,178,996	65,435,222	60,291,088
11. Amortization of defense projects	1,368,167	1,685,277	2,748,693	3,053,875
12. Federal income taxes	18,653,423	22,323,963	37,406,418	46,065,627
13. Dividend appropriations:				
13–01. On common stock	18,607,788	26,503,653	25,009,383	29,662,262
13–02. On preferred stock	8,792,165	4,268,196	13,459,824	6,593,944
Ratio of income to fixed charges (Item 5 ÷6—04)	1.23	1.62	1.34	1.64

United States

Selected Expenditure and Asset Items	Balance at the end of February 1949	Balance at the end of February 1948
17. Expenditures (gross) for additions and betterments—Road	$45,807,666	$39,978,898
18. Expenditures (gross) for additions and betterments—Equipment	172,583,672	129,461,023
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	519,198,716	564,513,121
20. Other unadjusted debits	130,781,960	166,073,195
21. Cash	880,507,529	939,272,443
22. Temporary cash investments	1,010,231,850	981,926,950
23. Special deposits	116,721,574	127,287,363
24. Loans and bills receivable	1,902,988	12,624,511
25. Traffic and car-service balances—Dr.	48,236,003	51,524,309
26. Net balance receivable from agents and conductors	133,167,535	139,298,679
27. Miscellaneous accounts receivable	316,794,040	335,082,393
28. Material and supplies	881,765,810	788,305,409
29. Interest and dividends receivable	11,765,621	16,114,782
30. Accrued accounts receivable	148,211,643	173,298,971
31. Other current assets	40,595,108	40,929,027
32. Total current assets (items 21 to 31)	3,589,899,701	3,605,664,837
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$204,736,532	$134,823,747
41. Loans and bills payable[3]	4,341,352	3,915,000
42. Traffic and car-service balances—Cr.	83,348,882	108,899,889
43. Audited accounts and wages payable	587,856,117	627,972,491
44. Miscellaneous accounts payable	194,161,599	208,715,465
45. Interest matured unpaid	34,709,872	46,562,069
46. Dividends matured unpaid	9,788,025	8,200,229
47. Unmatured interest accrued	92,495,293	85,547,963
48. Unmatured dividends declared	48,017,861	40,643,864
49. Accrued accounts payable	235,687,407	185,055,792
50. Taxes accrued	772,186,934	659,817,550
51. Other current liabilities	78,948,341	113,204,363
52. Total current liabilities (items 41 to 51)	2,141,541,683	2,088,534,675
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	642,766,187	539,968,542
53–02. Other than U. S. Government taxes	129,420,747	119,849,008
54. Other unadjusted credits	278,576,396	335,483,339

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Louis 3, Mo. Regular meetings, fourth Tuesday of each month, except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill. Annual meeting, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—J. A. Dinges, Union Tank Car Company, 228 N. LaSalle St., Chicago 1, Ill. Regular meetings, second Monday of each month except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

CHICAGO LUNCHEON CLUB OF MILITARY RAILWAY SERVICE VETERANS.—Col. R. O. Jensen, Schiller Park, Ill. Luncheon second Wednesday of each month, Chicago Traffic Club, Palmer House, Chicago, Ill.

COORDINATED RAILROAD MECHANICAL ASSOCIATIONS.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill. Annual meeting, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION.— W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark. Annual meeting, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

MAINTENANCE OF WAY CLUB OF CHICAGO.— E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, when the third Monday, at Eitel's Restaurant, Field Bldg.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y. Annual meeting, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

METROPOLITAN MAINTENANCE OF WAY CLUB.—John Vreeland, Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in October, December, February and April.

MILITARY RAILWAY SERVICE VETERANS.—S. Thomson, 1061 W. Sheridan Road, Chicago 40, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, August, 1949, Hotel Cleveland, Cleveland, O.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—Frank Cross, General Mills, Inc., Oklahoma City, Okla.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Miss Lois E. Casavant, 930 F. St., N. W., Washington 4, D. C. Annual meeting, October 3-5, 1949 (tentative), Henry Grady Hotel, Atlanta, Ga.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C. Annual meeting, November 17-18, 1949, Palmer House, Chicago, Ill.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—R. B. Fisher, 59 E. Van Buren St., Chicago 5, Ill.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—J. R. Thexton, Delaware Lackawanna & Western R.R. Co., Hoboken, N. J. Annual meeting, October 25-27, 1949, probably at the Hotel Morrison, Chicago, Ill.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August and September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION.—E. N. Myers, Minnesota Tranfer Ry., 1434 Iowa Ave., W., St. Paul 4, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION.—R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB.—S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 445-447 N. La Salle St., Chicago 10, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. LaSalle St., Chicago 4, Ill. Annual meeting, September 19-22, 1949, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, 60 E. 42nd St., New York 17, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo. Annual meeting, September 12-14, 1949, Peabody Hotel, Memphis, Tenn.

ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 12-14, 1949, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHEASTERN DIESEL RAILWAY CLUB.—John Sims, P.O. Box 155, Buena Vista Station, Miami 37, Fla. Regular meetings, second Tuesday in February, April, June, August, October, and December, 9:30 a.m., Mayflower Hotel, Jacksonville, Fla.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E. Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—E. E. Humble, High Point, Thomasville & Denton R.R., High Point, N. C. Next meeting, July 27-28, 1949, Hotel McAllister, Miami, Fla.

TORONTO RAILWAY CLUB.—D. L. Chambers, P. O. Box 8, Terminal "A", Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill.

UNITED ASSOCIATION OF RAILROAD VETERANS.—Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y. Annual meeting, October 8-9, 1949, Hotel Roanoke, Roanoke, Va.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago, Ill. Regular meetings, third Monday of each month, except January, June, July, August and September, Hotel Sherman, Chicago, Ill.

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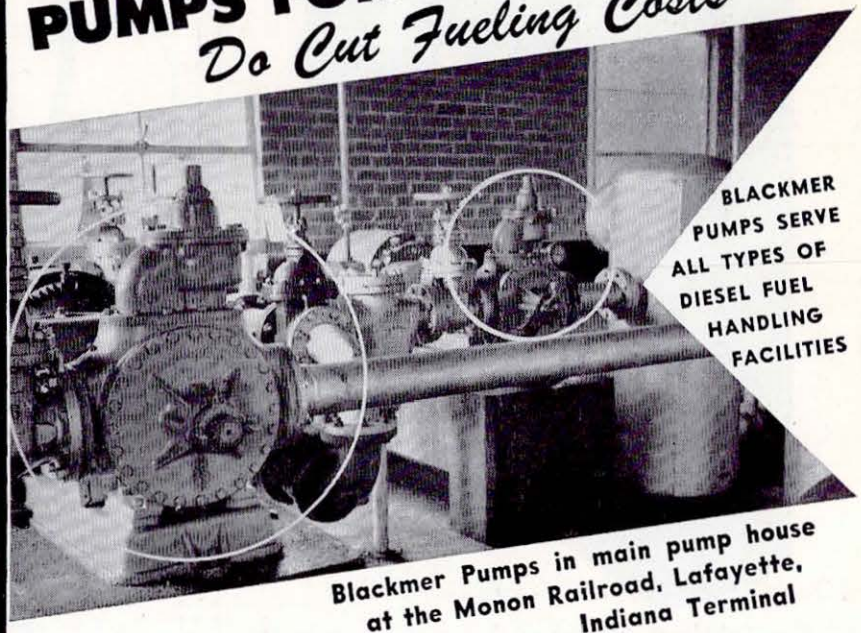

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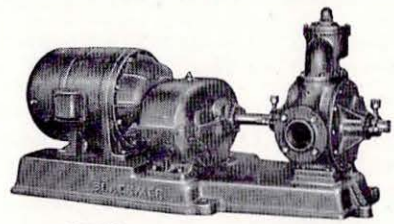
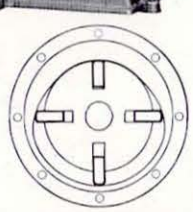


Swinging Vanes



Sliding Vanes

Write for Bulletin 307 **"FACTS ABOUT ROTARY PUMPS"**

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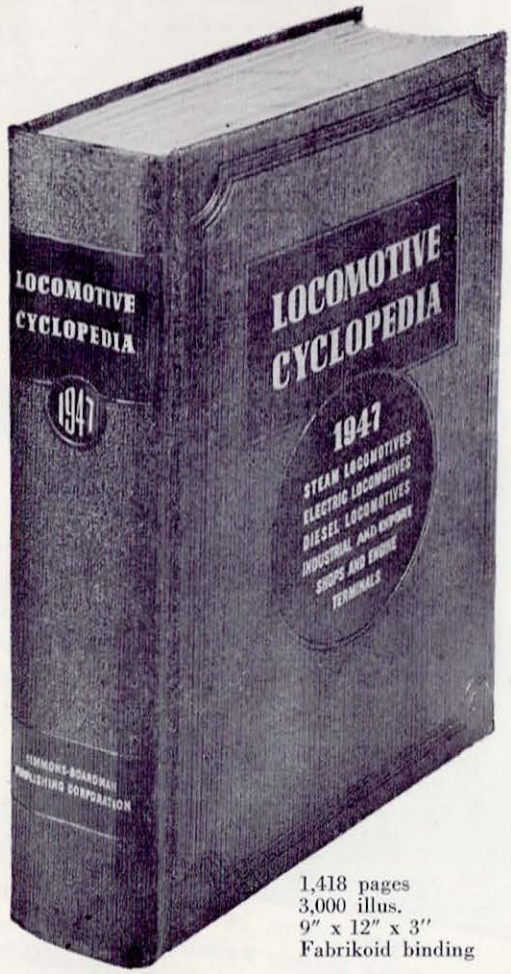

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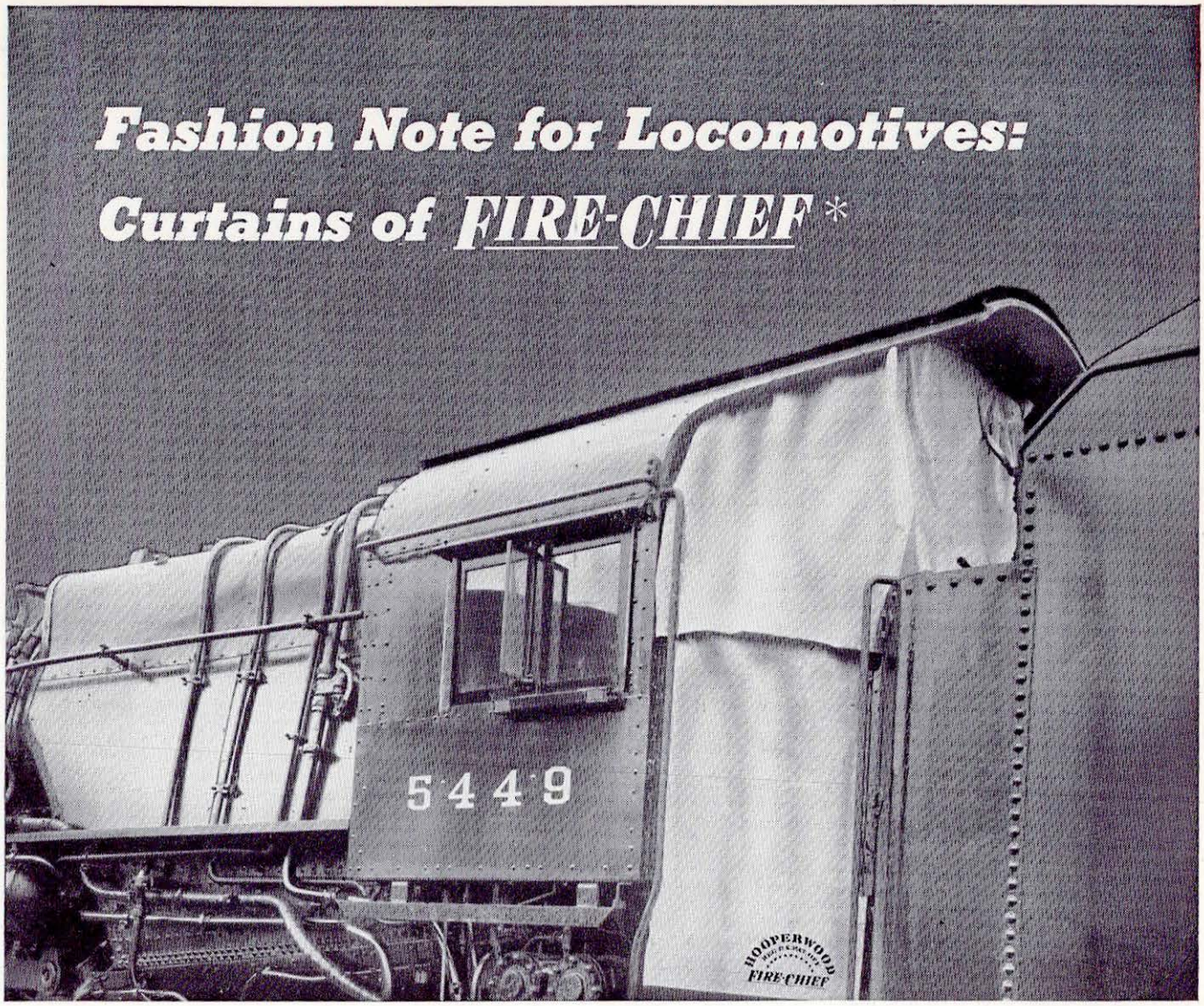

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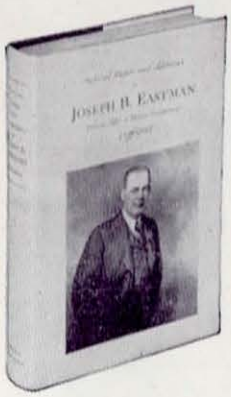

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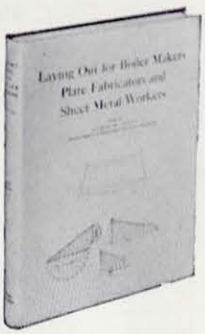

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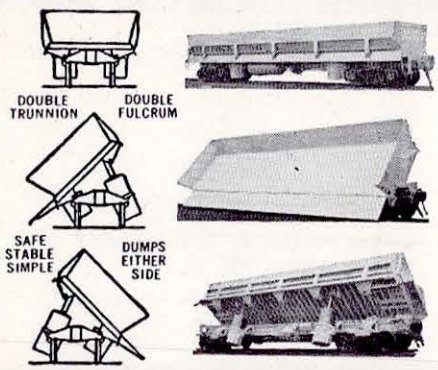

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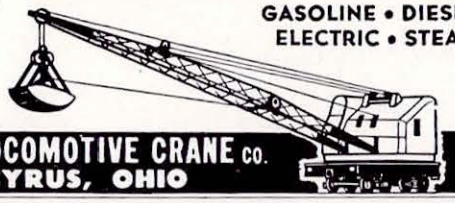

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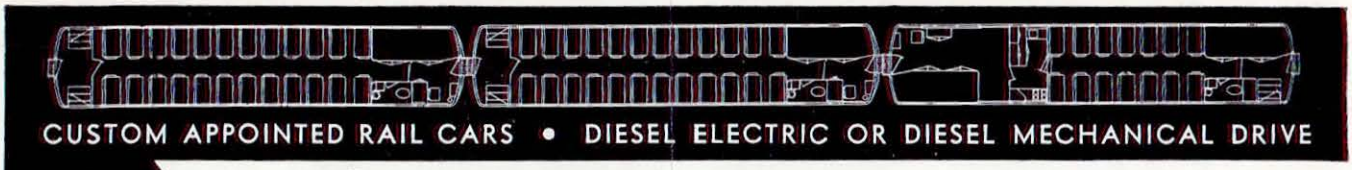

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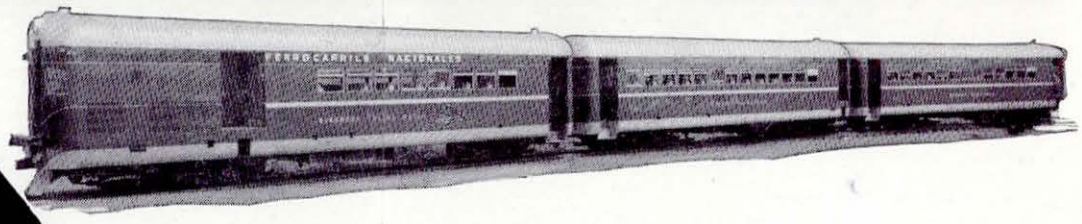

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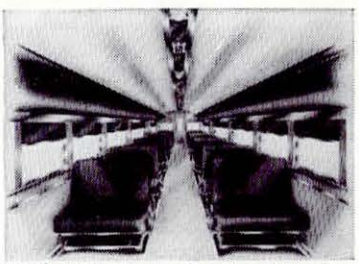

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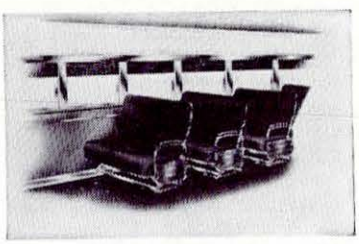

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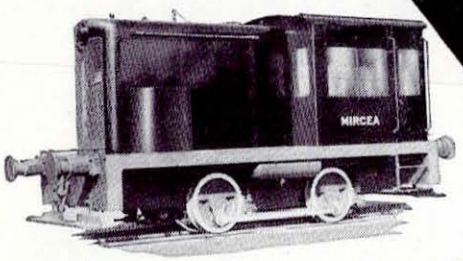

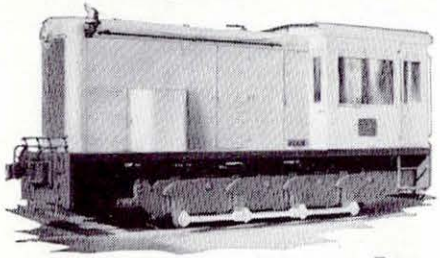

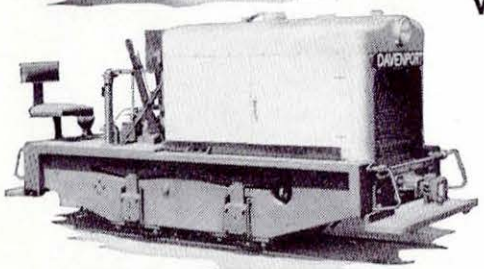

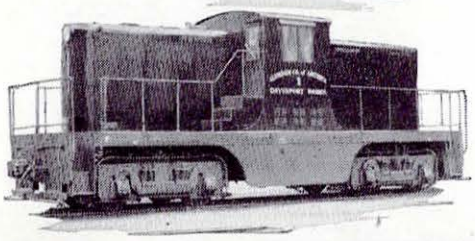

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You will find it easy to describe your haulage conditions, and the work to be accomplished, by using a Haulage Survey Data Sheet which we will gladly send to you. Davenport engineers will analyze the data you send us and, without obligation, will recommend the proper size and type of locomotive for your particular work.

WE INVITE INQUIRIES *from* RAILROAD OFFICIALS

It will be a pleasure to provide detailed technical descriptions of the Colombia train to inquiring railroad officials. Our engineers will consider it a privilege to analyze special transportation problems in the interests of increased operating efficiency.

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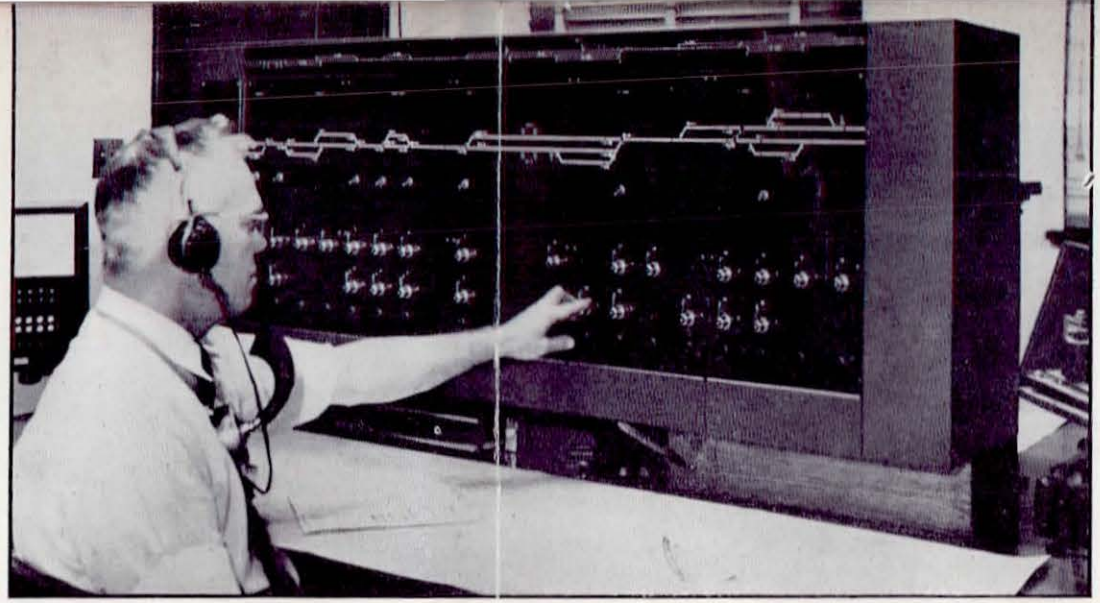
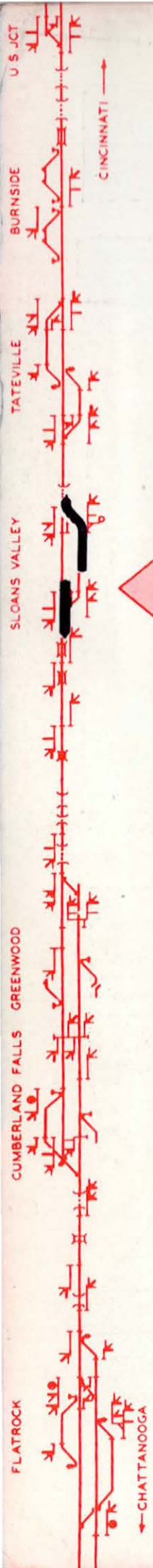




This non-stop meet saves 24 minutes!

G-R-S CENTRALIZED TRAFFIC CONTROL was recently installed on 19 miles between U. S. Junction and Flat Rock, Ky., on the Southern. This section is mainly single track because of the numerous tunnels, bridges, trestles, and curves due to the rough terrain. The railroad north of the territory to Cincinnati, and south toward Chattanooga, is double track.

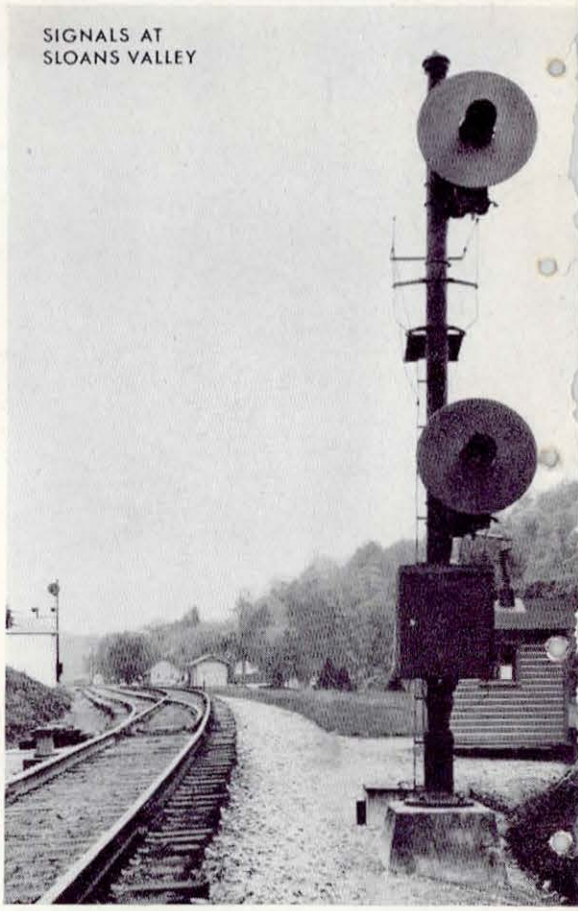
These conditions naturally slowed traffic in this territory, but the congestion has been relieved by the installation of G-R-S cTc. For example, after cTc was in service, a northbound passenger and a southbound fast freight made a non-stop meet at Sloans Valley. Under previous train-order operation, one of the trains would have been delayed 24 minutes.*

Other benefits. . .

- Average running time of freights has been cut 12 minutes.
- Freight train speed has increased 5 m.p.h.
- Train stops are saved because of power switches and controlled signals.

You can obtain similar advantages from G-R-S cTc. Ask for a study by calling your nearest G-R-S district office.

*Railway Age, Feb. 7, 1948.



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